# Sample Educational and Interpretive Programs and Products

In this section are samples of wilderness interpretive and education products developed by specific parks. They were compiled from responses to a Servicewide request for materials. Most products have wilderness as their primary theme, though a few integrate wilderness as one component of a larger theme or goal. All of these products interpret *designated* wilderness, rather than providing general information about wilderness.

Use these examples to develop your own wilderness education products. The products can then be placed in the "Site-Specific Educational and Interpretive Programs" section of this notebook to inspire future generations of interpreters and educators at your park.

For interagency consistency in wilderness interpretation, the following goal and objectives have been developed. As you create wilderness programs and interpretive products, work to meet the outlined objectives.

#### Goal:

To preserve the resources and values of designated wilderness by fostering development of a personal stewardship ethic for the National Wilderness Preservation System in participants through increased awareness, knowledge, understanding, and appreciation of wilderness.

### Objectives:

By the end of this program, participants will be able to:

- I. Define wilderness according to the Wilderness Act.
- 2. Explain why the Wilderness Act was established.
- 3. State who establishes wilderness areas, where wilderness areas are, and who manages wilderness areas.
- 4. Differentiate between wilderness areas and other public lands.
- 5. List three benefits of wilderness areas (reservoirs of biological diversity, scientific value, watersheds, life support systems, historic and cultural values, spiritual values, aesthetic values, recreation, refuge, education values, etc.).

Wilderness is inherently tangible and intangible. Tangibles include designated wilderness, the National Wilderness Preservation System, wildlife, water, air, and prehistoric and historic cultural artifacts. Intangibles include solitude, preservation, wildness, vision, past, future generations, humility, system, history, habitat, refuge, stewardship, hope, and mystery. Wilderness evokes many universal concepts including heritage, community, fear, change, hope, struggle, freedom, patriotism, renewal, home, tradition, survival. Successfully linking these tangibles and intangibles to the universal concepts will provide opportunities for your audience to make meaningful connections to wilderness.

Wilderness is such a comprehensive and complicated subject that creating a program on wilderness can appear daunting. Yet, starting with the basic goal and objectives and using the following examples as a guide, you can successfully incorporate wilderness into park programming.

## Sample Educational and Interpretive Programs and Products

- I. Wilderness Education Plans
- 2. Wilderness in Comprehensive Interpretive Plans
- 3. Interpretive Program Outlines
- 4. Education Curriculum
- 5. Site Bulletins
- 6. Articles (Park Publications)
- 7. Articles (Outside Park)
- 8. Backcountry Brochures
- 9. Exhibits
- 10. News Releases
- II. Events
- 12. Posters
- 13. Multimedia

## 1. Wilderness Education Plans - Page VI.D5

Gulf Islands National Seashore (see pp. VI.D5-11) Shenandoah National Park (see pp. VI.D12-16)

### 2. Wilderness in Comprehensive Interpretive Plans - Page VI.D17

Appalachian National Scenic Trail (see pp. VI.D17-18)

Dry Tortugas National Park (see p. VI.D18)

El Malpais National Monument (see p. VI.D18)

Glacier Bay National Park and Preserve (see p. VI.D18)

Hawaii Volcanoes National Park (see p. VI.D18)

Isle Royale National Park (see p. VI.D18)

Mt. Rainier National Park (see p. VI.D5-19)

Petrified Forest National Park (see p. VI.D19)

Shenandoah National Park (see pp. VI.D19-20)

Yellowstone National Park (see p. VI.D21)

## 3. Interpretive Program Outlines - Page VI.D23

"From Fearsome to Fascinating," Interpretive Slide Program, Mt. Rainier National Park (see pp. VI.D23-24)

"Fox Hollow Hike," Shenandoah National Park (see pp. VI.D25-27)

"At Home in the Wild," Limberlost Hike, Shenandoah National Park (see pp. VI.D28-31)

"Rose River Loop," Shenandoah National Park (see pp. VI.D32-37)

"The Wild Side of Shenandoah," Interpretive Slide Program, Shenandoah National Park (see pp. VI.D38-42)

"Explore Wild Shenandoah," Resource Immersion Program, Shenandoah National Park (see pp. VI.D43-46)

# 4. Education Curriculum - Page VI.D47

The Culture of Wilderness WebQuest, NPS Alaska Region Support Office (see p. VI.D47)

Education Curriculum, Black Canyon of the Gunnison National Park/Curecanti NRA (see pp. VI.D48-52)

Teacher Activity, Black Canyon of the Gunnison National Park/Curecanti NRA (see pp. VI.D53-54)

Boundary Waters Canoe Area Wilderness Kit, U.S. Forest Service (see pp. VI.D55-85)

Wilderness Curriculum Guide, Gulf Islands National Seashore (see p. VI.D86)

Wilderness Education Curriculum, National Geographic Society (see pp. VI.D87-89)

Advanced Wilderness Education Experience Summary, Olympic National Park (see pp. VI.D90-91)

Advanced Wilderness Education Experience Program, Olympic National Park (see pp. VI.D92-95)

Field Seminars Booklet, Shenandoah National Park (see p. VI.D97)

WildLink Project Summary, Sierra Nevada Wilderness Education Project (see p. VI.D98)

WildLink Recipes, Sierra Nevada Wilderness Education Project (see p. VI.D99)

## 5. Site Bulletins - Page VI.D101

"Badlands Wilderness and Sage Creek Campground," Badlands National Park (see pp. VI.Dioi-102)

"Wilderness," National Park Service Wilderness Program (see pp. VI.Dio3-104)

#### 6. Articles - Park Publications - Page VI.D105

"Celebrate a New Wilderness," Great Sand Dunes National Monument and Preserve (see p. VI.D105)

"What Is Wilderness?" Lassen Volcanic National Park (see p. VI.D106)

"Discovering Wildness at Cinder Cone" Lassen Volcanic National Park (see p. VI.D107)

"Go Wild With Shenandoah!" Shenandoah National Park (see p. VI.D108)

"A WILD Idea" and "As You Visit, Leave No Trace," Shenandoah National Park (see p. VI.D109)

"Go WILD, A Wilderness Challenge," Shenandoah National Park (see p. VI.DIIO)

"Call of the Wild, Wilderness in Shenandoah National Park," Shenandoah National Park (see p. VI.DIII)

"Wilderness Daily Reports," Yosemite National Park (see pp. VID112-113)

# 7. Articles - Non-NPS Publications - Page VI.D115

"Wilderness, A Place Apart," Holbrook Tribune, Petrified Forest National Park (see p. VI.DII5)

"Preserving Shenandoah," American Park Network Guide, Shenandoah NP (see pp. VI.D116-117)

### 8. Backcountry Brochures - Page VI.D119

"Backcountry Guide," (pages 1 and 8), Glacier National Park (see p. VI.DII9-120)

"EXPLORE Shenandoah's Backcountry," Shenandoah National Park (see pp. VI.D121-122)

### 9. Exhibits - Page VI.D123

Visitor Center Exhibit Panels, Shenandoah National Park (see pp. VI.D123-124)

"Spirit of Wilderness" Interactive Exhibit, Shenandoah National Park (see pp. VI.D125-127)

#### 10. News Releases - Page VI.D129

"Shenandoah National Park's Field Seminar Explores . . . ," Shenandoah National Park (see p. VI.D129)

"Park Seminar Celebrates the Art of Wilderness," Shenandoah National Park (see p. VI.D130)

"Shenandoah Celebrates 25 Years of Designated Wilderness . . . ," Shenandoah National Park (see p. VI.D131)

"WildLink Program Promotes Diversity in Wilderness," Yosemite National Park (see p. VI.D132-133)

#### 11. Events - Page VI.D135

Wilderness Weekend pamphlet, Shenandoah National Park (see p. VI.D135)

Wildflower Weekend pamphlet, Shenandoah National Park (see p. VI.D136)

# 12. Posters - Page VI.D137

"Focus on Wilderness," Badlands NationalPark (see p. VI.D137)

"Leave No Trace Outdoor Ethics and Skills," Badlands NationalPark (see p. VI.D138)

"Renewal," Shenandoah National Park (see p. VI.D139)

"Forever Wild," Shenandoah National Park (see p. VI.D140)

"Solitude," Shenandoah National Park (see p. VI.D141)

"Untrammeled" Shenandoah National Park (see p. VI.D142)

"Using Traditional Tools," Shenandoah National Park (see p. VI.D143)

#### 13. Multimedia - Page VI.D145

"Journeys to Wilderness Canyons," Black Canyon of the Gunnison NP/Curecanti NRA (see p. VI.D145)

"Journeys to Wilderness Canyons - Classroom Case Study," Black Canyon of the Gunnison NP/Curecanti NRA (see pp. VI.D146-149)

"The Olympic Wilderness," Olympic National Park (see pp. 150-152)

#### 1. Wilderness Education Plans - Gulf Islands National Seashore

## **GULF ISLANDS NATIONAL SEASHORE WILDERNESS EDUCATION PLAN**

#### Introduction

Wilderness is a place where human impact is significantly unnoticed, where natural processes rather than human activity are the primary influences. The Wilderness Act of 1964 was passed by the U. S. Congress to restrict grazing, mining, timber cutting and mechanized vehicles in federally designated wilderness areas. These areas valued for ecological, historic, scientific, and experiential resources are protected for future generations. The National Wilderness Preservation System is managed by the National Park Service, Forest Service, Fish and Wildlife Service, and the Bureau of Land Management, but all citizens have a role and responsibility for protecting designated wilderness areas.

In 1978 the U. S. Congress designated Horn Island and Petit Bois Island as wilderness areas. Located approximately ten miles offshore, these two barrier islands parallel the Mississippi coastline at its eastern end, part of a longer string of barrier islands defining the Mississippi Sound.

This Wilderness Education Plan specifically addresses ways that Mississippi Gulf Coast residents and visitors can be better informed about these wilderness barrier islands and their own role in protecting and preserving them.

## **Background**

## Past and Present Wilderness Interpretation Practices

Gulf Islands National Seashore has employed a variety of interpretive practices to educate the public about the wilderness barrier islands, with past and present interpretive practices ranging from public programs to media events.

Each November is Wilderness Month, featuring special programs on wilderness at Davis Bayou featuring speakers such as John Anderson (son of well-known regional artist Walter Anderson, whose art celebrated Horn Island and other coastal treasures) and Ed Zahniser (son of Howard Zahniser, who wrote the Wilderness Act passes by Congress in 1964). Earth Day 2002 featured traveling "Leave No Trace" trainers presenting programs at Davis Bayou and offsite on low-impact wilderness visits. Information about the wilderness barrier islands is included in the press release, which announces Wilderness Month activities each November.

Interpretive staff have contributed to an exhibit on Horn Island at the George Ohr Art Museum, to interpretive programs on Horn Island as reflected in the artwork of Walter Anderson, and to exhibits of local artists' Horn Island works at the Davis Bayou Visitor Center.

Visitors to Davis Bayou may learn more about the wilderness barrier islands through information on the wilderness islands in the current park brochure, through the more comprehensive 8-page brochure "Camping on a Wilderness Barrier Island," and through a focus on the wilderness barrier islands in Davis Bayou's orientation videos shown in the Visitor Center auditorium. Children participating in the annual summer Junior Ranger program learn about wilderness and the wilderness barrier islands.

Gulf Islands National Seashore sponsors press trips to Horn Island every other year, providing news reporters and still and video photographers the opportunity to report on the wilderness barrier islands. Participation in these trips by local and regional media has made first-hand information on the wilderness barrier islands available to television audiences and newspaper readers across Mississippi, Louisiana, and Alabama. Articles in *Mississippi Outdoors Magazine* (1997) and *Coast Magazine* (1998) and short segments on Horn Island suitable for use between programs on *Mississippi ETV* have also been coordinated by park staff.

To reach a broader audience of children, a wilderness activity trunk with an accompanying wilderness curriculum teachers' guide is currently being prepared and will soon be available to teachers across the region.

## Origins and Activities of Wilderness Barrier Island Visitors

Gulf Islands law enforcement and resource management rangers indicate that the majority of visitors to the wilderness barrier islands are local residents. Biloxi and Ocean Springs boaters frequently use the central and western end of Horn Island. Gautier and Pascagoula boaters frequently use the eastern end of Horn, as well as Petit Bois. Petit Bois, particularly its eastern tip, sees a number of Alabama boaters from communities like Mobile, Bayou Le Batre, and Dauphin Island. The islands are also visited by people from upstate Mississippi cities such as Hattiesburg, Laurel, and Jackson, though with less regularity than local boaters.

A number of visitors to the wilderness barrier islands are persons who visit the islands repeatedly. Of the several hundred boats that may anchor off the west tip of Horn Island on a particular summer weekend, or of the dozens of boats that may anchor there in other seasons, many are repeat visitors.

Visitors generally relax on board or on the beaches, swim, or fish. Wade fishing on sand flats is a popular activity for island visitors.

#### **Future Projections on Wilderness Barrier Island Use**

Interviews with law enforcement and resource management rangers indicated a belief that most visitors to Horn Island and Petit Bois Island come from western Harrison County MS, Jackson County MS or eastern Mobile County AL. Based on this assumption, U.S. Census Bureau data were examined for four counties in closest geographic proximity to Horn Island and Petit Bois Island: George County MS, Harrison County MS, Jackson County MS, and Mobile County AL. Populations of these four counties for 2000 were compared with population projections to determine expected rates of population growth over the next ten years.

| Populations and Population Projections<br>Selected Coastal Counties |           |           |           |  |  |
|---|-----------|-----------|-----------|--|--|
| County  | 1990      | 2000      | 2010      |  |  |
| George County MS  | 16,673    | 19,144    | 22,650    |  |  |
| Harrison County MS  | 165,365   | 189,601   | 203,095   |  |  |
| Jackson County MS   | 115,243   | 131,420   | 153,013   |  |  |
| Mobile County AL  | 378,643   | 399,843   | 444,448   |  |  |
| Mississippi   | 2,573,216 | 2,844,658 | 3,118,171 |  |  |

Population figures are based on U.S. Census Bureau data. Population projection figures based on Mississippi Institutions of Higher Learning data.

| Population Increases and Rate of Growth Selected Coastal Counties |                                 |                                |  |  |
|---|---------------------------------|--------------------------------|--|--|
| County  | Actual Growth<br>1990-2000      | Projected Growth<br>2000-2010  |  |  |
|   |                                 |                                |  |  |
| George County MS<br>Harrison County MS                            | 2,471 (14.8%)<br>24,236 (14.6%) | 3,506 (18.3%)<br>13,494 (7.1%) |  |  |
| Jackson County MS   | 16,177 (14.0%)                  | 21,593 (16.4%)                 |  |  |
| Mobile County AL  | 21,200 (5.6%)                   | 44,605 (11.2%)                 |  |  |
| Mississippi   | 271,422 (10.5%)                 | 273,513 (9.6%)                 |  |  |

Population figures are based on U.S. Census Bureau data. Population projection figures based on Mississippi Institutions of Higher Learning data.

## Populations and Population Projections

As indicated in the accompanying table, "Populations and Population Projections, Selected Coastal Counties," populations in all four counties between 1990 and 2000 rose and are projected to continue to rise between 2000 and 2010. As indicated in the table "Population Increases and Rate of Growth, Selected Coastal Counties," the rate at which growth occurs is expected to increase slightly in George and Jackson Counties, decrease in Harrison County, and more than double in Mobile County.

In George and Jackson Counties, increases in population over the current decade (2000 –2010) are expected to be slightly more than the increases in population seen in the 1990's in those two counties. In other words, George and Jackson Counties are expected to continue to grow as they have since 1990.

While the rate of growth in Harrison County over the current decade (2000-2010) is expected to fall to half the growth rate of the 1990's, the actual number of persons added to the population is still significant. Harrison County added 24,235 more people between 1990 and 2000 and is projected to add another 13,494 between 2000 and 2010. In other words, while Harrison County's rate of growth is slowing, the population of this largest Mississippi coastal county is expected to continue to rise significantly between 2000 and 2010.

Of the four counties in closest geographic proximity to the wilderness barrier islands, Mobile County is expected to experience the greatest increase in rate of growth between 2000 and 2010. While its 1990-2000 growth rate was low in comparison to the faster-growing Mississippi coastal counties, Mobile County's growth rate between 2000 and 2010 is expected to more than double. Because its current population is larger than the combined populations of all of Mississippi's coastal counties, this increase is significant for projections of future wilderness barrier island use.

Combining population figures for all four counties, growth patterns are significant. In 1990, there were 675,924 people living in the four counties closest to the wilderness barrier islands. In 2000, there were 740,008 people in those four counties. The 2010 projected population of the four counties is 823,206. These changes represent a 9.5% rate of growth between 1990 and 2000, and an 11.2% rate of growth between 2000 and 2010.

## Demographic Projections

According to demographic projections made by the Center for Policy Research and Planning of Mississippi's Institutions of Higher Learning, there are not expected to be significant demographic changes. White-to-nonwhite ratios are expected to remain relatively stable over the current decade (9:1 in George County, 3:1 in both Harrison and Jackson Counties, and 3:2 in Mobile County). Although Harrison County has a somewhat younger population, George and Jackson Counties both currently have larger cadres of people in their late teens and early twenties and in their forties. As these populations age, age-related bulges in the population of these counties by 2010 are expected to reflect larger cadres of people in their twenties and fifties.

## Implications of Population and Demographic Data

In summary, what do current and projected population and demographic data indicate for future wilderness barrier island use? Local, regional, and state populations will continue to rise, with continued concentrations of young and middle-aged persons dominating the age curve. Overall, the local population (from which many wilderness visitors come) has grown by nearly 10% over the last decade and is expected to grow by more than 10% over the current decade.

Given the extent of recent population growth and the projections for future growth, it is logical to extrapolate that the number of wilderness visitors will also increase. In fact, estimates made by NPS of the number of visitors to the wilderness barrier islands support such an extrapolation. While recent changes in the NPS accounting formulas for determining the number of park visitors make exact comparisons difficult, counts clearly show significantly increased numbers of visitors.

Even with changes in the accounting formulas employed, these estimates indicate that more people visited the wilderness barrier islands in 2000 than in 1980, a trend likely to continue as area populations continue to increase.

| Estimated Number of Park Visitors |         |         |  |  |
|-----------------------------------|---------|---------|--|--|
| County                            | 1980    | 2000    |  |  |
| Total Park Visitors               | 577,649 | 750,394 |  |  |
| Island Campers on All Islands     | 12,675  | 6,329   |  |  |
| Visitors to Horn Island           | 18,050  | 32,459  |  |  |
| Visitors to Petit Bois Island     | 9,634   | 17,459  |  |  |

With increased use of the wilderness barrier islands come increased problems, unless there is a corresponding increase in wilderness education efforts.

## Problems Facing Those Charged With Managing and Protecting the Wilderness Barrier Islands

A number of problems, both geographic and societal, face those charged with managing and protecting the wilderness barrier islands:

- I. Not all Coast residents and visitors know that Petit Bois and Horn Island are <u>federally designated</u>, protected wilderness areas.
- 2. Not all Coast residents and visitors know that federally designated wilderness areas are <u>managed and</u> protected by a federal agency like the National Park Service.
- 3. Not all Coast residents and visitors understand that federally-designated wilderness areas <u>exist so that people can experience wild places</u> without disturbing or destroying natural processes at work there, thus keeping wilderness wild for future visitors.
- 4. Not all Coast residents and visitors understand that federally designated wilderness areas are protected and valued for ecological, historical, scientific, and experiential reasons that make them <u>important to</u> everyone.
- 5. Not all Coast residents and visitors have a <u>land ethic</u> that causes them to act in ways that help protect the wilderness barrier islands.
- 6. Not all Coast residents and visitors understand <u>how to visit</u> wilderness barrier islands without disturbing or destroying them.
- Not all Coast residents and visitors understand how their actions can lead to <u>damage and even loss of</u> wilderness.
- 8. Not all Coast residents and visitors understand that <u>everyone has a role</u> in protecting the wilderness barrier islands.
- 9. Over the past decade, both the resident population of the Coast and the number of visitors to the Coast have risen sharply, a trend expected to continue in the future. These increases mean that <u>more people</u> will impact the islands, either directly through visits to the islands or indirectly through ecological changes on the mainland that impact the islands and the surrounding Mississippi Sound.
- 10. Most visitors to the wilderness barrier islands do not funnel through a central entry point where contact with them can be made and where they can be educated about responsible use of wilderness areas. Instead, efforts to reach and educate visitors to the wilderness barrier islands must begin by reaching them wherever they are.
- II. Distributing printed material such as pamphlets or brochures to educate visitors to the wilderness barrier islands <u>may in fact add to the litter problem</u> on and around the islands. Other vehicles for educating visitors may be more effective and less impacting.

12. Some next-generation wilderness barrier island visitors are learning negative behaviors by observing their elders misuse wilderness areas, rather than learning positive behaviors. Thus, the threat that uninformed or uncaring visitors pose to wilderness barrier islands may be <u>perpetuated in future</u> generations.

# Methods for Educating the Public About the Wilderness Barrier Islands Goals

- To spread the word to local residents and visitors that we have federally-designated wilderness areas right here on our own doorstep.
- To impart a land ethic to local residents and visitors that leads them to act in way that protect and preserve wilderness barrier islands.
- To educate local residents and visitors about positive, low-impact use of wilderness barrier islands.

## Audience

- Local Coast residents, particularly the boating public.
- Tourists, both one-time visitors and returning visitors.
- Children who can help to educate parents.

# Methods for Consideration

#### Staff-intensive Methods

Establish a cadre of specially selected and specially trained park volunteers to support and supplement rangers specifically for the wilderness barrier islands. The growing pool of retired or semi-retired persons in the population should provide an ever-increasing source for this specially selected group; many people who might not otherwise volunteer might respond to the appeal of volunteering on a wilderness barrier island. These specially trained volunteers would then work with rangers to reach the public in ways such as the following:

- I. Rangers or park volunteers can offer weekend walking tours of a wilderness barrier island, providing the opportunity to interpret the importance of wilderness and practices that preserve it. These walking tours will reach private boaters who visit the islands on weekends, particularly those with children aboard who are likely to participate because they see the walking tour as a positive experience for their children.
- 2. Rangers or park volunteers in small watercraft such as the Boston Whalers can move from boat to boat around the wilderness barrier islands on weekends, interacting in an educational capacity rather than a law-enforcement capacity to educate island visitors. For instance, environmentally friendly litter bags imprinted with good wilderness practices might be distributed on these boat-to-boat visits.
- 3. Rangers or park volunteers can offer flotilla day-trips to a wilderness barrier island, available to people in small private boats who might want to visit one of the islands but who might not feel comfortable making the trip alone. These flotilla trips would provide the opportunity to interpret wilderness concerns and positive practices.
- 4. Rangers or park volunteers can form a Speakers Bureau, making themselves available to local civic groups, schools, etc., to let people know that we have federally-designated wilderness areas right here on our own doorstep. Rotarians, Chamber of Commerce members, Sierra Club members, etc., form a population of persons who might think of wilderness only as places as far away from us as Jackson Hole or one of the western parks. Learning to think of our wilderness barrier islands as federally designated wilderness will help to change attitudes about their use.
- 5. On boat trips provided by Incidental Permit Holders licensed to carry passengers to the islands, rangers or park volunteers can interpret the importance of wilderness areas and the practices that help to protect and preserve them.

# Media-centered Methods

Use the public media, including newspapers, radio, and television, to inform Coast residents and visitors about our wilderness barrier islands and the practices that preserve and protect them. Specifically, radio, television, and newspapers could be employed in the following ways:

- 6. Prepare a short videotaped presentation that (a) builds the understanding that Petit Bois and Horn Island are federally designated wilderness areas, (b) celebrates the value of these areas and the need to preserve and protect them for future generations, (c) teaches what practices do and do not disturb or destroy these areas, and d) imparts a land ethic that leads people to act in ways that preserve and protect the wilderness barrier islands. This videotape would be modeled on "Conviction of the Heart," though shorter and specific to our wilderness barrier islands. The videotape could be used in a multitude of places, including:
  - As a continuous loop video program at the Colmer Visitors' Center.
  - As a continuous-loop video program on board the Ship Island ferry (perhaps in the snack room onboard).
  - On the tourist-information television channel.
  - During public-service time provided by local television channels (WLOX, Fox, METV).
  - At meetings of civic groups.
  - · In schools.
- 7. Prepare a thirty-second or one-minute spot that celebrates the fact that we have wilderness on our own doorstep. For instance, the spot might open with scenes of what people typically think of as wilderness—a western mountain range, an Alaskan snowfield, etc.—and the howl of a wolf or other sound-effect that evokes typical images of wilderness. A voice-over could then say, "Wilderness—it's something we all need. But is it necessarily far away?" Then the western or northern image could fade to waves, then sea birds flying, and then a shot of a barrier island, and the howl of the wolf could fade to the sound of waves crashing and sea birds calling. The voice-over could then say, "It's right here on our own doorstep. Horn Island, Petit Bois. Our wilderness barrier islands. They're here for everyone. Take care of them." This thirty-second or one-minute spot could run as public-service time on local television stations, as local access programming (Channel 13 on Cable One), or on the tourist information minute recently initiated by WLOX.
- 8. Prepare a related 30-second sound recording using the same format as described in number 7 above. Air this sound spot on public-service time on local radio stations.
- 9. Interest "Mississippi Outdoors" on METV in a program devoted to Petit Bois and Horn Island as wilderness barrier islands right here in Mississippi.
- 10. Interest local and regional newspapers in doing a feature article on Petit Bois and Horn Island as wilderness barrier islands right here in Mississippi. Include Coast newspapers like the SUN HERALD and MISSISSIPPI PRESS, and regional newspapers like the HATTIESBURG AMERICAN, MOBILE PRESS REGISTER, CLARION LEDGER, etc.
- II. Interest COAST MAGAZINE and other local magazines in articles on the wilderness barrier islands. Promote this idea by emphasizing that we have right here what people often travel far away to find.
- 12. Prepare a "boiler-plate" piece to be added to any or all NPS press releases, highlighting the barrier islands as federally designated wilderness areas.

## Printed-material Distribution Methods

Distribute printed information about the wilderness barrier islands and their protection in the form of materials that are of use to recipients, in order to minimize the chance that brochures and pamphlets simply end up as litter adding to the problem rather than helping to solve it.

- 13. Design an environmentally friendly litter bag that shows the NPS logo, a message like "Protect your wilderness barrier islands," and a short set of basic rules for low-impact visits to wilderness barrier islands. Distribute these at the Colmer Visitors' Center and at bait shops and other places where boaters fill up before trips.
- 14. Design a waterproof boating/fishing map that shows the barrier islands, latitude and longitude lines, selected GPS numbers for key spots such as the buoy at the western end of Horn Island, the horseshoe

on Horn Island, popular nearby fishing reefs, etc. On the back of the map, print the NPS logo, a message like "Protect your wilderness barrier islands," and a short set of basic rules for low-impact visits to wilderness barrier islands. Distribute these at the Colmer Visitors' Center and at places frequented by boaters and anglers, such as:

- · Sport fishing association meetings
- Fishing rodeos and tournaments
- Bait shops
- Boating and marine supply stores
- · Outboard boat and motor sales stores
- Fishing-license bureaus
- 15. Design a 3"x8" leaflet that includes the NPS logo, a message like "Protect your wilderness barrier islands," and a short set of basic rules for low-impact barrier island visits. Establish a partnership with the MS Department of Wildlife, Fisheries and Parks to distribute these small leaflets along with boat registrations mailed to boat owners in coastal and adjacent counties. The leaflet could include a brief "Did you know...? section that identifies the islands as wilderness barrier islands and a brief "If you go..." section listing the basic rules for low-impact island visits.

## Miscellaneous Other Methods

- 16. Design a sign that can be erected at the high-use launch ramps that open onto the Sound. Similar to signs at trailheads in other parks, this sign could carry the message "Protect your wilderness barrier islands," the NPS logo, and a short set of basic rules for low-impact visits to wilderness barrier islands. For most wilderness barrier island visitors, the area's most popular launch ramps are their entry points to wilderness.
- 17. Add an educational component to the Coastwide Clean-Up, with rangers or park volunteers speaking briefly to those who gather to help in the cleanup. Distribute the litter bags described in #13 above and/or the fishing/boating map described in #14 above as thank-you's. Although this is "preaching to the choir," the clean-up volunteers may learn something new and may pass on these materials to others.
- 18. Distribute to schools a small, inexpensive curriculum pack, which includes a copy of the video-taped presentation described in #6 above, along with several primary, several intermediate, and several middle-school level lesson plans to accompany the video-tape. Children who understand the importance of preserving wilderness may reach their parents with this message.
- 19. Establish a partnership with the Department of Marine Resources to include information on the wilderness barrier islands in the boating safety course required for all persons born after 1980.
- 20. Prepare a web page on the wilderness barrier islands, including maps and photos as well as basic rules for low-impact visits, and establish links to it from governmental and business web sites including localarea Chambers of Commerce, coastal county tourism departments, DMR, boat charter and boat sales businesses, etc.

## Conclusions

Local, regional, and statewide populations are growing and will continue to grow. With population growth comes increased use of the wilderness barrier islands. Increased use brings increased risks to these fragile islands, demanding intentionally more intensive wilderness education efforts.

#### 1. Wilderness Education Plans - Shenandoah National Park

#### SHENANDOAH NATIONAL PARK WILDERNESS EDUCATION PLAN, 2002-2007

## **Program History**

To preserve Shenandoah National Park's wilderness resource, the park established a Wilderness Education Program in 1997. A Wilderness Education Plan was written in support of the revised Backcountry and Wilderness Management Plan. The program has been successfully implemented and has received national recognition for its accomplishments.

#### 1997

- Secured Natural Resource Protection Program (NRPP) funding to implement revised Backcountry and Wilderness Management Plan.
- · Received NPS Wilderness Management and Stewardship Award.

## 1998

 Backcountry survey conducted by Virginia Technological University showed that the visitors to Shenandoah's backcountry and wilderness area support wilderness yet do not differentiate between the concept of wilderness and designated wilderness. Survey report recommended that Shenandoah managers consider increasing wilderness education efforts.

#### 1999

- Hired term position to implement education component of Backcountry and Wilderness Management Plan through NRPP funding.
- · Integrated wilderness into regularly scheduled interpretive programs.

#### 2000

Visitor Study conducted by University of Idaho shows that 71% of visitors rate "experiencing wilderness" as a very important reason for visiting Shenandoah National Park. 92% of visitors rated wilderness as very important in "planning for the preservation of the park for future generations."

#### 200I

- Integrated wilderness education into Shenandoah's Comprehensive Interpretive Plan.
- Conducted first Wilderness Weekend commemorating Shenandoah National Park's 25th anniversary of designated wilderness.

# National Park Service Policy Directives for Wilderness Education

Shenandoah National Park's Wilderness Education Program is consistent with National Park Service policy and initiatives.

#### NPS 2001 Management Policies 6.4.2 Wilderness Interpretation and Education

"In the context of interpretive and educational planning, national park units with wilderness resources will:
(I) operate public education programs designed to promote and perpetuate public awareness of, and appreciation for, wilderness character, resources, and ethics, while providing for acceptable use limits; (2) focus on fostering an understanding of the concept of wilderness that includes respect for the resource, willingness to exercise self-restraint in demanding access to it, and an ability to adhere to appropriate, minimum-impact techniques; and (3) encourage the public to use and accept wilderness on its own terms; i.e., the acceptance of an undeveloped, primitive environment and the assumption of the potential risks and responsibilities involved in using and enjoying wilderness areas. National Park Service interpretive plans and programs for wilderness parks will address the primary interpretive themes for wilderness. Education is among the most effective tools for dealing with wilderness-use management problems and should generally be applied before more restrictive management tools."

## Directors Order #41 Sec. C6

"The Comprehensive Interpretive Plan for parks with wilderness will include and address the primary park interpretive themes that reflect the wilderness significance statements that appear in the park's GPRA Plan. Wilderness character and resources should be included in the park's interpretation and educational program, and be included as an integral component of the long range interpretive plan and annual implementation plan.

Public interpretation and education is essential for the support, understanding, and protection of wilderness. On-site programs may include talks, walks and other presentations, trailhead information, publications, and wilderness information centers or exhibits in existing visitor centers. Off-site and outreach programs may include a variety of presentations, curriculum-based education programs, web page sites, and publications.

Staff education is an integral part of any wilderness education program. Wilderness awareness training will be incorporated into all appropriate training programs. Examples include orientation training for seasonal park staff, cooperating associations, concessions, and volunteers. Park managers are encouraged to establish partnerships to better promote the benefits and values of wilderness."

NPS Wilderness Education and Partnership Plan, 2002, National Wilderness Steering Committee "The goal of the NPS Wilderness Education and Partnership Plan is to broaden awareness, knowledge, appreciation and support of wilderness in an increasingly diverse population. . . . Desired results include increased public support for wilderness that results in protection of wilderness resources and preservation of wilderness for future generations." The plan outlines significance statements, interpretive themes, and products which guide development of wilderness education programs.

#### **Shenandoah Management Directives**

Shenandoah National Park's Wilderness Education Program is consistent with Shenandoah National Park's Strategic Plan 2001–2005 and with Shenandoah National Park's Backcountry and Wilderness Management Plan.

#### Shenandoah Long Term Goals

Iao: By September 30, 2005, 90% of changes to natural and cultural resources in wilderness and backcountry areas caused by visitor behavior are within acceptable levels.

Iao.I: Wilderness and backcountry leaders and users demonstrate outdoor skills and ethics through the Wilderness Education Program and its multiple partnerships.

- IIbi: By September 30, 2005, 90% of visitors surveyed understand and appreciate the significance of the park.
- IIbi.i: Shenandoah visitors learn accurate stories, through current scholarship, about the park significance and build connections through personal interpretive programs, interpretive exhibits and AV, and printed media, which incorporate different points of view.
- IIbi.2: Citizens in neighboring communities find opportunities to build long-lasting and meaningful connections to the park by exploring critical issues through special-interest programming and temporary exhibits and become supporters of park mission goals.

### Shenandoah Backcountry and Wilderness Management Plan Chapter II

"Most experts believe that the majority of unacceptable visitor impacts in backcountry or wilderness settings are nonmalicious acts. ... Persuasive and well directed information can be highly effective in reducing environmental impacts, visitor conflicts, and problem behaviors."

#### **Shenandoah Wilderness Education Program Goals**

Education and interpretation are effective management tools to prevent resource damage and to preserve wilderness resources in perpetuity. The following goals define the Wilderness Education Program's vision through 2007.

- By 2007, park visitors and neighbors exhibit a knowledge and appreciation for the history and value of wilderness as a unique resource and are active stewards in conserving wilderness areas.
- By 2007, park staff, concession staff, partners and managers communicate accurate wilderness messages to the public.
- 3. By 2007, wilderness user groups, including local summer camps and university outdoor groups, demonstrate and promote appropriate wilderness ethics and minimum impact guidelines as outlined by the Leave No Trace program.
- 4. By 2007, land management agencies and non-government organizations are full partners in expanding and implementing wilderness education locally and nationally.

#### Strategies

Strategies provide measurable actions which achieve the goals of Shenandoah's Wilderness Education Program.

Goal I - By 2007, park neighbors and visitors exhibit a knowledge and appreciation for the history and value of wilderness as a unique resource and are active stewards in conserving natural environments.

- Plan and implement an annual Wilderness Weekend.
- Plan, coordinate, and implement 30th anniversary celebration of Shenandoah's designated wilderness in 2006.
- Determine appropriate standards of learning for the development and implementation of a curriculum based wilderness education program for schools.
- Integrate wilderness ethics and appropriate minimum impact messages consistent with Leave No Trace principles into "Parks As Classroom" pre and post visit activities and teacher information packets.
- Plan and implement overnight expeditions into Shenandoah wilderness area for local high school students.
- · Plan and conduct outreach programs to non-traditional wilderness visitors.
- · Conduct seminars focused on wilderness issues as part of Shenandoah's Field Seminar series.
- · Publish articles annually in Shenandoah Overlook on wilderness topics, issues and values.
- Integrate wilderness messages into planning and installation of permanent interpretive exhibit at Dickey Ridge Visitor Center.
- Integrate wilderness messages into planning and installation of permanent interpretive exhibit at Byrd Visitor Center.
- Integrate wilderness messages into planning and installation of permanent interpretive exhibits at Panorama Visitor Center.
- Integrate wilderness messages into planning and installation of temporary interpretive exhibits at Loft Mountain Information Center.
- Integrate wilderness messages into planning and installation of temporary interpretive exhibits at Backcountry Information Center.
- · Integrate and update wilderness information on Shenandoah's web page.
- Implement interactive computer touch-screen program project into Dickey Ridge Visitor Center interpretive Exhibit.
- Implement interactive computer touch-screen program project into Byrd Visitor Center interpretive Exhibit.
- Implement interactive computer touch-screen program project into Panorama Visitor Center interpretive Exhibit.

· Install interactive computer wilderness program into Shenandoah's Internet services.

**Goal 2** - By 2007, park staff, concession staff, partners and managers communicate accurate wilderness messages to the public.

- · Conduct annual training for park interpretive staff on Leave No Trace, park backcountry and wilderness management policy, and interpretation of the history and value of wilderness.
- Conduct annual training for seasonal staff in all divisions on wilderness, wilderness ethics and Leave No Trace principles.
- Conduct at least one Leave No Trace Train The Trainer course for park and concession personnel annually.
- · Update Wilderness Resource Notebook for field employees annually.
- Integrate wilderness themes into park interpretive services including media development, interpretive programming, interpretive displays, exhibits, publications, and bulletin boards.
- Assist in revising Shenandoah's Backcountry and Wilderness Management Plan to ensure wilderness education component.
- Write articles for internal interagency publications such as People, Land, Water, the Arrowhead and NPS website InsideNPS.
- · Seek and obtain outside funding for projects and actions.
- Establish interdivisional Shenandoah wilderness education advisory group to maintain communication, cooperation, and support for wilderness education projects.
- · Prepare annual Wilderness Education Plan based on five-year plan and share with park staff.
- · Produce annual reports of Wilderness Education Program for management team and Shenandoah National Park workgroups.

Goal 3 - By 2007, wilderness user groups, including local summer camps and university outdoor groups, demonstrate and promote appropriate wilderness ethics and minimum impact guidelines as outlined by the Leave No Trace program.

- Establish formal partnerships and working relationships with local college and university outdoor recreation programs. Coordinate trainings, education programs, and college classes for staff members and students.
- Coordinate an outdoor recreation workshop for regional college and university program leaders.
- Establish working partnerships with local summer camps to integrate wilderness ethics and Leave No Trace principles into their operations.
- Establish formal partnerships with local outdoor retailers to institute and promote appropriate wilderness ethics and minimum impact principles into their operations.
- Assist with revision of Shenandoah's Backcountry Camping brochure to ensure continued wilderness message.
- Work with Natural Resources Division to ensure wilderness education component in Shenandoah's cliff management plan.

**Goal 4** - By 2007, federal land management agencies, non-government organizations are full partners in expanding and implementing wilderness education.

- Coordinate local, regional, and national Boy Scout and Girl Scout events to promote wilderness ethics and Leave No Trace principles and techniques.
- · Implement components of NPS Wilderness Education and Partnership Plan.
- Advise and inform NPS National Wilderness Steering Committee on regional and national wilderness education and interpretation issues.
- Assist with production of a wilderness NPS Unigrid brochure in cooperation with Harpers Ferry Center.
- · Assist with production of a wilderness handbook in coordination with Harpers Ferry Center.
- Assist with revision of Arthur Carhart National Interagency Training Center education curriculum.

- Plan and implement activities celebrating 40th anniversary of The Wilderness Act, September 3, 2004 in coordination with national initiatives.
- Participate in planning and development of the Wilderness Stewardship Expo and Summit, October 2004.
- Continue planning and implementing wilderness education events and activities with the Potomac Appalachian Trail Club.
- Present Shenandoah and NPS wilderness education programs at professional venues, including The George Wright Society, Arthur Carhart National Interagency Wilderness Training Center, National Association of Interpretation, North American Association of Experiential Education.
- Coordinate development and distribution of wilderness information with the NPS Natural Resources Information Division.
- Assist Potomac Appalachian Trail Club LNT committee with logistical support and equipment for LNT trainer courses.
- Coordinate publication of wilderness information in regional and national publications such as The Potomac Appalachian, LNT Tracker, Backpacker Magazine, and the National Parks Conservation Association magazine.

## **Assessing Success**

Shenandoah National Park's Wilderness Education Program will monitor and evaluate program success. The long-term goal of the Wilderness Education Program is to increase the public's awareness, knowledge and understanding of designated wilderness. Therefore:

By 2007, 80% of participants in Wilderness Education Program activities demonstrate awareness, knowledge and understanding of designated wilderness.

Methods used to measure this goal include, but are not limited to:

- Participant evaluations
- · Visitor comments
- · Direct observation of visitor interaction with wilderness exhibits
- · Documentation of articles in local press
- · Documentation of resource conditions in Shenandoah's backcountry and wilderness area

#### 2. Wilderness in Comprehensive Interpretive Plans

#### Appalachian National Scenic Trail - Draft Interpretive Themes

Partnershop and Stewardship (Ethical)

The Appalachian Trail is a living example of citizen volunteers working with governments and professionals to create and perpetuate a national treasure.

The Appalachian Trail . . .

- Has a history rooted in private citizen action and public professional land conservation.
- Depends on individual and societal commitments to the ideals of stewardship, volunteerism and responsible use for it's survival.
- Can be cared for and protected by embracing the ethics and skills of Leave No Trace.
- Offers the opportunities to participate in the protection of the resource.
- Offers opportunities to learn concepts and values like conservation, respect, and fellowship that can be internalized and transferred to daily life off the Trail.

### Linking Communities (Social)

The Appalachian Trail is a thread that unites many diverse communities for recreation, learning, and the protection of public lands.

The Appalachian Trail . . .

- · Offers locally accessible recreation within a days drive of two-thirds of America's population.
- · Offers recreation opportunities with friends and family.
- · Fosters a sense of community among those who travel on it and those who work to protect it.
- · Preserves land for future generations.

## Inspiration and Renewal (Emotional and Spiritual)

The Appalachian Trail offers opportunities for personal renewal and inspiration through recreation in the natural environment removed from the pressures of modern society.

The Appalachian Trail . . .

- Offers scenic places with opportunities for contemplation, remoteness, and detachment.
- Is an example of simplicity and sustainability in practice through foot travel.
- Offers relief from urban/suburban congestion.
- · Fosters a connection to the land.

## Resource Diversity

The Appalachian Trail traverses a diverse array of biological and cultural regions. It offers a protected corridor for resources and opportunities for the public to learn about them.

The Appalachian Trail . . .

- Offers a wooded corridor with a sense of wilderness in places once dominated by the actions of humanity
- Can be as close to civilization as back yards and towns, or as remote as wilderness areas Subtheme: Constancy and Change (Natural Resources)
  - A Place of Timelessness: old growth, alpine zones, ice age remnants, wilderness, southern Appalachian balds.
  - A Place of Change: succession forest, fire ecology, wilderness, pollution (air, water, and soil), geology (mountain building, fossils), non-native species.
  - A Place of Protection: watersheds, wilderness, habitat protection, raptor migration, forestry practices. <u>Subtheme: Human Traces Along the Trail</u> (Cultural Resources)
  - A Place of Industry: charcoal pits, iron furnaces, mining, logging, trains, C&O NHP, Harpers Ferry NHP, mills, dams, highways, TVA.
  - A Place of Conflict: Over Mountain Victory NHT TN, Mosby's Raiders VA, Harpers Ferry NHP WV, Battle of South Mountain MD, Fort Dietrich Snyder PA, Shay's Rebellion MA, Carry Pond ME.
  - A Home Place: native peoples, early European settlement, mountain cultures (Brown Mountain Creek VA, Shenandoah National Park, Aldrichville VT), agriculture, CCC, music, literature.

# Adventure and Challenge (Physical)

The Appalachian Trail provides opportunities for physical and mental challenges.

The Appalachian Trail . . .

- Offers a sense of accomplishment.
- Encourages independence and self-reliance.
- · Provides opportunities for long distance hiking.

#### Dry Tortugas National Park - General Management Plan and Comprehensive Interpretive Plan Themes

Dry Tortugas National Park is a one-of-a-kind resource. It offers unique opportunities for cognitive, affective, sensory, and behavioral experiences to visitors. As such, visitors to Dry Tortugas National Park will be able to:

- Experience the essence of the park's wild and remote nature—from wildlife, coral reefs, and scenery to wonder, quiet, solitude, and personal inspiration.
- Hear the echoes of the past through stories the park preserves.
- Develop a sense of appreciation and responsibility that will result in actions to protect, support, and promote the park and the National Park System (e.g., politically, financially, through volunteer activities).
- Successfully plan their visits and orient themselves to facilities, attractions, features, and experiences.
- Behave in ways that do not hurt themselves or park resources.
- Enjoy themselves, have memorable experiences, and go home feeling enriched.
- Understand the park's significance and the park's primary interpretive themes.
- Experience programs, media, and facilities that enhance their educational experiences.
- Learn about the fragility of the park and threats to its resources.

## El Malpais National Monument – Primary Interpretive Theme

The many conditions and unusual environments of El Malpais National Monument have created a diverse wilderness providing varied opportunities for exploration, discovery, and solitude.

## Glacier Bay National Park and Preserve - Long Range Interpretive Plan

<u>Vision</u> - Glacier Bay is a globally significant marine and terrestrial wilderness sanctuary—a place that offers human solitude and a remote wildness that is rapidly disappearing in today's world. Glacier Bay is a place of hope—for the continued wisdom, restraint, and humility to preserve samples of wild America, the world as it was. Glacier Bay is part of one of the largest internationally protected Biosphere Reserves in the world, and it is recognized by the United Nations as a World Heritage Site.

<u>Theme</u> - Glacier Bay is a place of hope—for it preserves a sample of wild America.

<u>Subthemes</u> - (a) Glacier Bay is one of the few remaining intact ecosystems left on the globe. (b) Here is a place to experience wilderness on its own terms.

#### Hawaii Volcanoes National Park - Interpretive Theme

Hawaii Volcanoes National Park provides an opportunity for people to experience the values of Hawaii's diverse wilderness; the park's designation as a World Heritage Site and International Biosphere Reserve attests to its importance as a benchmark for monitoring environmental change.

## Isle Royale National Park - Interpretive Theme

Isle Royale is one of 380 National Park units and part of the National Wilderness Preservation System, which together protect and provide enjoyment of this nation's natural, cultural, and wilderness resources.

## Mount Rainier National Park - Interpretive Theme and Subthemes

- Mount Rainier's pristine wilderness has ecological, social, scientific, educational, recreational, and cultural value. The value of Mount Rainier's wilderness increases exponentially as areas outside the park are developed and open space is lost.
- By law, Mount Rainier wilderness is managed to retain its primeval character and natural conditions, and to preserve wilderness as a special place for people to examine their relationship to the world.
- The park's management of natural resources over the past century mirrors American society's changing understanding and appreciation of wilderness values.
- Mount Rainier wilderness is a source of inspiration, providing boundless opportunities for exploration, solitude, contemplation, and physical and mental challenge.
- The survival of the park's wilderness depends on individual and societal commitment to the idea of wilderness, a stewardship ethic, and appropriate visitor use and behavior when in wilderness areas.

## Petrified Forest National Park - Comprehensive Interpretive Plan

<u>Park Mission</u> - Petrified Forest National Park preserves, protects, and interprets a globally significant example of a Late Triassic ecosystem and a continuum of human use in a high desert/short grass prairie environment. It preserves wilderness values for recreation, solitude, natural quiet, long-distance views, and night skies. It provides outstanding opportunities for scientific research and education.

<u>Park Purpose</u> - The purpose of Petrified Forest National Park is to provide opportunities to experience, understand, and enjoy the Petrified Forest and surrounding area in a manner that is compatible with the preservation of the park's resources and wilderness character.

Resource Significance - The park contains over 50,000 acres of parkland designated and managed as wilderness.

# Primary Interpretive Themes

Wilderness - Wilderness in Petrified Forest National Park, one of the first proclaimed in the United States, allows natural processes to continue undisturbed, and to be experienced by visitors on nature's terms—a significant chapter in America's heritage, and legacy to global citizens.

 Petrified Forest National Park offers opportunities for experiencing dramatic skies and weather patterns, long-distance views in excess of 120 miles, brilliant night skies, natural quiet, solitude, re-creation, and reflection.

Visitor Experience Goals - (a) Experience wilderness and wildness. (b) Enjoy solitude.

## Shenandoah National Park - Comprehensive Interpretive Plan

Significance of Shenandoah National Park - Park significance clearly defines the most important things about the park's resources and values. Significance statements describe the distinctiveness of the combined resources in the park including natural, cultural, scientific, recreational, spiritual, and other values. Significance is not the same as an inventory of significant resources. Park significance is important in identifying resource management and protection priorities, identifying primary park wide interpretative themes, and in defining the kinds of visitor experiences most appropriate to the park.

• The park has become a sizeable "natural area" with large areas of designated wilderness and is an outstanding example of the Blue Ridge/Central Appalachian biome.

<u>Goals</u> - Goals describe management's intent in offering interpretive and educational programs and services. They are statements that describe opportunities for the public and suggest how interpretation may change

the way the public, including organized groups, will think, feel, or act as a result of their park experience. Goals are derived from overall management objectives and are long-range. The NPS Strategic Plan established four mission goal categories. Interpretation and Education services primarily fall under Mission Goal II: Provide for Public Use and Enjoyment and Visitor Experience of Parks. National Park Service Strategic Plan goals are the basis for preparing park strategic plan goals.

## National Park Service Mission Goal I: Preserve Park Resources

- Mission Goal Ia: Natural and cultural resources and associated values are protected, restored and maintained in good condition and managed within their broader ecosystem and cultural context.
- Shenandoah National Park Long-term Goal Iao: By September 30, 2005, 90 percent of changes to natural
  and cultural resources in wilderness and backcountry areas caused by visitor behavior are within
  acceptable levels.
- Mission Goal Goal Iao. Wilderness and backcountry leaders and users demonstrate outdoor skills and ethics through the Wilderness education program and its multiple partnerships.

<u>Visitor Experience Statement</u> - The Visitor Experience Statement relative to interpretation defines how the interpretive process will facilitate a physical, intellectual, and emotional experience based on previously described themes and goals.

The Visitor Experience Goals in Shenandoah National Park should incorporate the Visitor Profile, and all goals must be construed to include all visitors by overcoming barriers of physical ability, language, and cultural differences in an effort to serve our diverse population.

The visitor experience in Shenandoah National Park should directly reflect its purpose and significance. To that end, the Interpretation and Education Division will facilitate opportunities for the visitor to:

- Have a traditional "national park experience."
- Experience recreation and re-creation in the historic context of personal contemplative pleasure.
- Become aware of the conscious change in human use of a land.
- Observe an outstanding example of Blue Ridge/Central Appalachian Biome and areas of designated wilderness.
- · Visit national register historic sites.
- Experience the Appalachian Trail and its associated values.

## <u>Issues and Influences Affecting Interpretation</u>

Internal and external issues and influences significantly affect interpretation and education services at Shenandoah National Park. This includes any long-range Servicewide initiatives, influences outside the park, resource-based issues, and internal management issues. These help to determine direction and set priorities in interpretive services. This section lists the current issues and influences and describes the existing conditions that form the planning basis for the next five years.

Wilderness Interpretation and Education – The 2001 NPS Management Policies and Director's Order #41: Wilderness Preservation & Management direct parks to include wilderness interpretation and education in interpretive planning in parks with wilderness resources. In addition, the approval of the NPS Wilderness Education and Partnership Plan is expected in 2001. Shenandoah National Park has become a national leader in wilderness education. In 1997, the park received a monetary donation from a local constituent specifically to develop a backcountry and wilderness education program for the park. This program has significantly grown to include many partners including the U.S. Forest Service, Bureau of Land Management, National Outdoor Leadership School, Leave No Trace, Inc., Boy Scouts of America, and the Carhart National Wilderness Training Center. A Natural Resource Protection Program (NRPP) grant funded a subject-to-furlough wilderness interpreter for a term of three years ending in 2001. In 2000, a park education specialist accepted the collateral responsibility of the National Leave No Trace Program Coordinator for the Park Service. Funding from the Washington Office supports both of the wilderness interpretation and education positions. The current level of programs and services will not be maintained without the conversion of the term position to permanent and the continued outside funding support.

## Yellowstone National Park - Primary Interpretive Themes

Ecosystem - The greater Yellowstone area is one of the largest and most intact temperate ecosystems in North America; it supports an exceptional concentration and diversity of terrestrial and aquatic life. The Greater Yellowstone Ecosystem extends well beyond the park's boundary. It encompasses unique thermal features, the headwaters for many rivers, diverse habitats and life forms, research benchmarks, sustainable recreational and economic opportunities, and wilderness. It is conceptualized and viewed by the public in the contexts of contemporary issues, values, and personal meanings.

<u>Wildness</u> - Yellowstone is an extraordinary place where visitors can experience wildness. The Greater Yellowstone Ecosystem preserves a vital part of America's wilderness system. Experiences of wildness range from scenic driving and day hiking to backcountry hiking and camping to off-site experiences through the media, outreach programs, the Internet, and personal photographs, stories, and recollections.

#### 3. Interpretive Program Outlines - Mount Rainier National Park, Interpretive Slide Program

#### Program Name: "From Fearsome to Fascinating" - Paul Sadin, Interpreter

**Theme:** People's attitudes towards wild nature change over time. During this country's short history, wilderness lands that were once avoided and feared became prized, and eventually preserved, for the pleasure, adventure, and education they provide.

### Goals:

- I. Get people interested and excited about the wild nature found here at Mount Rainier, in the Ohanapecosh area, and even right here in the Ohana campground.
- Give people an idea of how and why the national parks (including Mount Rainier), the NPS, and the Wilderness Act were established, and what it is they have to offer visitors.
- 3. Paradoxical approach to resource protection: help visitors feel good about taking care of the park by emphasizing the behavior of tourists one hundred years ago.

#### Objectives:

- I. At least thirty-three percent of visitors in attendance will seek one new way of enjoying or appreciating the park.
- 2. Fifty percent will be able to name at least two possible uses of wilderness.
- 3. Eighty percent will recognize that Ohanapecosh campground is in a national park.

#### Outline:

#### I. Introduction

- I. To myself, to naturalist division, to interpretive activities
- 2. Intro to program: How much wilderness here in MRNP?
- 3. Seatco legend
- 4. Who has a story of their own to tell?

# II. Why Wilderness Was Once Feared and Avoided (begin slides)

- I. Fear of the unknown is natural: tell story of nighttime hike to Tolmie Peak.
- 2. Wilderness as a barrier to travel.
- 3. Wilderness as a threat: wild animals; getting lost.
- 4. Wilderness can be intimidating: tell story about Louisa, "It's too green."
- 5. Wilderness as evil.

## III. Wilderness in American history

I. First arrivals: Bradford quote.

#### IV. The fruitful wilderness

- I. Loggers, hunters, miners, and mountain men
  - a. Robert Service quote from "Spell of the Yukon."
  - b. Colter and Bridger stories about Yellowstone wilderness.
  - c. Hayden expedition and formation of Yellowstone National Park.
- 2. Yellowstone tourists of the 1800s—trashing the wilderness: they came in spite of the wilderness, not because of it.
  - a. James Gregory's journal re: Yellowstone tourists, and: "Our men made Old faithful useful as well as ornamental."
- 3. Yosemite tourists at Glacier Point.
- 4. Burroughs and Muir: "Climb the mountains and get their good tidings."
- 5. New attitudes towards nature: the outdoor life as cure-all.

## V. Wilderness at Mount Rainier

- I. Native tribes finding uses of the park
- 2. Coal in the Carbon River Valley
- 3. Mineral springs and hot springs

- 4. Adventuring and camaraderie
- 5. MRNP: 1899 NP as playground

# VI. Formation of the NPS and the 1964 wilderness Act

Is there any real wilderness left?

# VII. Finding your own wilderness at MRNP

I. You don't have to Climb...hike...etc. to find it: simply use your senses—all of them (with music).

Good night.

#### 3. Interpretive Program Outlines - Shenandoah National Park, Interpretive Walk

Program Name: Fox Hollow Hike - Gloria Updyke

**Theme:** Shenandoah National Park's wilderness history challenges us to reevaluate our definition of wilderness.

**Goals:** Audience will understand the importance of federally designated wilderness in Shenandoah, recognize their connection to wild lands, and be inspired to become stewards of wild lands.

**Objectives:** The audience will be able to:

- Explain their own definition of wilderness.
- 2. Define wilderness according to the Wilderness Act.
- 3. Identify the National Wilderness Preservation System.

**Purpose:** To understand the defintion of designated wilderness and determine what it means on a personal or individual level.

#### Materials and References:

National Wilderness Preservation System map National Park System map Quote cards

#### Outline

#### I. Introduction (Visitor Center or Terrace)

Gloria Updyke, welcome to Shenandoah National Park.

#### II. Theme

Naturalist John Muir once said "I went out for a walk and finally concluded to stay out till sundown, for going out, I found, was really going in." Today as we head out for a hike, or head into the park, we're going to see if we can discover the sense of wilderness that he was referring to when he said that he was really going *IN*.

- Shenandoah National Park (SNP) challenges us to reevaluate our definition of wilderness. We're going to
  explore these ideas as we explore the Fox Hollow Trail and its past. And what we discover here, you'll be
  able to find throughout your explorations in the park.
- Where is audience from? Name a national park in your state, rest of us guess state.
- Do you know a designated wilderness area in your state? (none in CT, RI, MD, DE, KA, IA)
- Show map, National Wilderness Preservation System
- SNP has 80,000 acres (of 197,000 acres) designated wilderness; define later.
- How many think of SNP as wilderness? May or may not fit your definition. Each of us will have different answers, different values, and that's okay. Think about what wilderness means to you on way to next stop.
- Walk logistics (I hour, I.3 miles), bring water, safety.

# III. View (Top of Fox Hollow Hill)

- Audience definitions of wilderness. Experience, place, natural, without humans, adventure, challenge, risk, etc.
- My definition, Organ Pipe.
- Is SNP wilderness? Small park, close to D.C., millions of visitors. SNP challenges us to reevaluate what wilderness is.
- Was this area always wilderness? No. Native Americans (probably thought of as home rather than wilderness.)
- Pass out quote cards. Have visitor read: Early settlers: "Wilderness is a damp and dreary place where all manner of wild beasts dash about uncooked!" — Anonymous
- Wilderness was a place to be conquered, feared, not preserved.

• Fox family right here, walking through their farms. Thomas and Martha Fox settled in 1850s. We'll be seeing signs of their descendents, people like Winfield Fox, who owned most of what the trail covers when the park was becoming authorized and established, 1926-36.

# Lemuel Fox was a young man in the 1920s as the park was being established. He farmed these fields on his uncle Winfield's farm.

- Audience read: "All this was clear. You could see all the way across the mountain, all the way to the top of the mountain. All of it was cleared fields." Lemuel Fox Jr.
- Imagine how it must have looked then. Think about why it looks different today. What changes have occurred?
- Although this part is not designated wilderness, as you hike and drive through the park, you will see similar signs of people who lived in almost all of what is now park, whether wilderness today or not.

## IV. Trail Post

- Hiking safety: explain to read metal bands to avoid getting lost in SNP.
- Dickey Ridge Trail takes you to the Appalachian Trail (A.T.)—A.T. is a special trail that Benton McKaye (visionary who came up with idea to create A.T. in 1920s) envisioned as traversing a protected wilderness belt along crest of Appalachians. Even in East, can have (linear) expanses of wilderness (2000 miles A.T.)
- · Notice brushy nature ahead. Notice when that changes.

## V. Where brush changes to open woods

- Former boundary (between fields, pasture, etc.)
- Can you see the boundary/fenceline, or the fallen gatepost?
- Walking down old county road toward Front Royal (pre-Skyline Drive). Foxes and Carters (of next door orchard) used it to get to town. Their buildings are gone (several houses for extended family and neighbors, barns, outbuildings), but can still discern old fields/pastures (point these out along the way). Also can see wire and stone fence along south side of old road (now trail) that kept the hogs and/or cattle where they belonged. (Dickey Ridge Visitor Center was a dining/dance hall built in cornfield 1937-38).

# VI. Sycamore Tree

- Was a lone shade tree in open pasture, the only tree on the hill then (says Lemuel Fox). Large spreading tree surrounded by smaller confined trees—see this throughout park.
- Unlike some wilderness places, such as Alaska, people lived/farmed throughout SNP (but it was NOT denuded wasteland, it was fertile, but rocky right here).
- Forest succession. Virginia Pine, Sassafras, and Locust are pioneer species that come up first in old fields. See a lot of it here and throughout park. Eventually, these young small species will be replaced with bigger longer lived—oaks, hickories. Through forest succession, the forest has grown back enough for some areas now to be designated wilderness.
- Audience read: "Perhaps then, wilderness will become something as humane as it is natural, as much within us as it is around us." —*Kim Heacox, Visions of a Wild America*
- Does this spot feel like wilderness? Why or shy not? Is SNP wilderness?
- Wilderness designation gives protection beyond what park service or forest service can provide—must be managed with different focus/goals.
- For places, society (and Congress) deems especially valuable and worthy of protection.
- Audience read: "A wilderness, is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain . . . an area . . . retaining its primitive character . . . with, outstanding opportunities for solitude or a primitive and unconfined type of recreation." Wilderness Act of 1964
- Is SNP untrammeled by man? Primitive character? Outstanding opportunities for solitude and recreation?
- · Let's walk a little further and think about it.

# VII. Foundation Hole

- A barn of Edgar Merchant, neighbor of the Foxes, had an apple orchard. On his property for short stretch.
- Eastern Wilderness Areas Act addressed areas in Eastern United States.
- Voices for SNP wilderness: Potomac Appalachian Trail Conference, Wilderness Society, SNP superintendent.

- Audience read: "Areas shall be managed to promote and perpetuate the wilderness character of the land and its specific values of solitude, physical and mental challenge, scientific study, inspiration, and primitive recreation." —Eastern Wilderness Areas Act 1975
- Show SNP wilderness area map.
- 1976: SNP had 80,000 acres designated.
- Managed by park, but added protection of Wilderness Act.
- Audience read: "We recognized, through its relatively small size . . . that our wilderness area was not of the highest order . . . while not supreme, we will NOT allow its primeval character, and its opportunities for solitude, inspiration, and physical and mental challenges to decline. Furthermore, we will strive, and might be able, to improve its overall quality." —Superintendent Jacobson, Shenandoah, 1976
- SNP—conscious choice to let nature return. People lost their homes (not always willingly). The people who built these rock piles, the people whose graves you saw, but now have a park to enjoy. Can honor their sacrifice by taking care of SNP today.

## VIII. Junction with Dickey Ridge Trail

- Audience read: "The mountains . . . offer a fighting challenge to heart, soul, and mind . . . they will keep alive in our people the spirit of adventure . . . A people who climb the ridges and sleep under the stars in high mountain meadows, who enter the forest and scale the peaks, who explore glaciers and walk ridges buried deep in snow, these people will give their country some of the indomitable spirit of the wilderness." William O. Douglas
- Maybe time for a revolutionary definition of wilderness—not think of wilderness as something separate from us, a boundary around us, but as a part of us, and us a part of wilderness, a place to respect and take care of, whether Alaska, Organ Pipe, SNP or own backyard.
- All our favorite places are unique, yet SNP's wild lands are exceptionally unique. Reflects society's changing definitions of wilderness from a dismal and hideous place to a place worthy of protecting.
- Audience read: "In wildness is the preservation of the world" —Henry David Thoreau

#### IX. Conclusion (Open Meadow)

- Controlled burn—question visitors about the need/impact of management activities on wild lands (burns, trail maintenance, scientific monitoring, policies re: things like flyovers, sound pollution, viewshed pollution, air quality, etc. Can they think of any more?)
- Can management activities affect how we view an area, both positive and negative, whether we consider it wilderness—consider the Forest Service clear cuts).
- Shenandoah National Park challenges us to reevaluate our definition of wilderness. By exploring Fox Hollow Trail and its history, we've explored a wild area and your own feeling and ideas about wilderness to take with you throughout your park visit and beyond.
- Thank for coming, mention other programs they can attend further into the park.
- Updyke read: "One final paragraph of advice: Do not burn yourselves out. Be as I am: a ...part-time crusader, a half-hearted fanatic. Save the other half of yourselves . . . for pleasure and adventure. It is not enough to fight for the land; it is even more important to enjoy it . . . While it's still here. So get out there . . . and mess around with your friends, ramble out . . . and explore the forest, encounter the bears, climb the mountains, bag the peaks, run the rivers, breathe deep of that . . . lucid air, sit quietly . . . and contemplate the precious stillness . . . Enjoy yourselves, keep your brain in your head and your head firmly attached to the body, the body active and alive, and I promise you this much: I promise you this one sweet victory over our enemies, over those desk bound people with their hearts in a safe deposit box and their eyes hypnotized by desk calculators. I promise you this: you will outlive them all." Edward Abbey
- Be wild, and be safe. And like John Muir, you may find that in going out for a walk, you are really going in.

#### 3. Interpretive Program Outlines - Shenandoah National Park, Interpretive Walk

#### Program Name: "At Home in the Wild" Limberlost Hike - Laura Cheek, Education Specialist

**Theme:** If home is where the heart is, then, after exploration, wilderness can be our home.

**Goal:** Create an experiential connection with the Limberlost area and Shenandoah NP that will lead to a personal commitment to preserve wild lands.

**Objectives:** At end of hike, participants will be able to:

- 1. Define wilderness according to 1964 Wilderness Act.
- 2. Identify National Wilderness Preservation System.
- 3. Differentiate between wilderness and wild lands.
- 4. Relate history of impact and preservation in what is now Shenandoah National Park.
- 5. List benefits of preserved wild lands.

**Purpose:** Increase awareness of and connection to wild lands to help preserve them for present and future generations, and wild animals.

#### **Materials and References:**

Book - *Girl of the Limberlost*Edward Abby or Howard Zahniser quote
Hand lenses
National Wilderness Preservation System maps
Pens
Shenandoah National Park postcards
Wilderness Act quote

## **Outline:**

# I. Introduction - Parking Lot

- A. Welcome
- B. Anyone been on Limberlost trail before?
  - I. Trail/walk details (many habitats, I.2 miles, stroll not hike)
  - 2. Speak up with questions, comments
- C. Anybody know why trail called Limberlost?
  - I. Named by Pollucks, associated with early 1900s Skyland Resort
  - 2. From popular book and movie in early 1900s
  - 3. Begins with a girl asking her mother to cut down old trees on their property in order to pay her way to school; you'll understand the significance of that story to this place later on in the walk.
  - 4. Limberlost the name of a wetlands in northern Indiana near author's home; a man named Limber disappeared there.
- D. We won't be getting lost here
  - But do encourage you to explore, to test and break boundaries of comfort, physically, mentally challenge yourself.
  - 2. Reach out to touch plants, bark, rocks—not animals! Please don't pick plants (photo or describe instead) or take rocks; please stay in center of trail.
  - Please be gentle, follow the philosophy of Leave No Trace—try to make sure others behind us will not know we were here.
  - 4. Hand out magnifying lenses; look at things close up, especially look for animals' homes.
- E. Any of you at all nervous about going on this hike?
  - I. (If no "glad you have confidence in yourselves and me")
  - 2. How about if we went off trail? If you went hiking on own?
  - To be honest, I feel more comfortable camping by myself out in the wilds than I do driving through downtown Washington DC.
    - a. I feel more at home.

- b. Yet definitely an element of fear and challenge—wouldn't want that to be taken away, for me that is part of wilderness.
- 4. Wild lands/wilderness has connotation of adventure, unknown, risk.
- 5. We will be exploring wild lands and wilderness, how we fit in, how we feel at home or don't.
- F. As we start off, look for things that are familiar to you and think about what makes a place home? What makes you feel at home? I'll ask for your thoughts at next stop.

## II. First Bench - Familiarity Leads to Preservation

- A. See anything familiar? Identify.
- B. Does familiarity make a place feel like home?
  - I. What else makes place home?—Discuss.
  - 2. Want to protect one's home?
- C. This place was home to people—will see evidence of that—look for.
  - 1. Protected by them for them.
- D. Who protects and preserves now? NPS does for you.
- E. This place thought to be special before NPS.
  - 1. One person singled out this place, the Limberlost, as special.
  - 2. Mrs. Pollock paid money to protect one type of tree-hemlock.
    - a. Paid \$1,000 for logging rights for 100 trees.
  - 3. Point out small one—identify features, feel softness as walk by.
  - 4. Hemlocks in decline—why? Talk about later—clue under needles close to trunk—some of you might be familiar with what is affecting the hemlocks.
- F. Why do people preserve/protect places besides their homes?
- G. Look around and think about as we go on—we'll talk about at next stop.

# III. Fourth Bench - Why Protect Places?

- A. Discuss their answers.
- B. Experience, future generations, habitat (Blackburnian warbler breeding here—state rare bird), wildlife, endangered species (rare millipede, orchid, sedge), resources, history, etc.
- C. Walk to and point out apple and cherry trees—what do these trees tell us?
  - I. People planted these trees, so made home here.
  - 2. History, human story.
- D. Walk to locust tree—"disturbed" tree—comes into areas disturbed naturally or by humans—look for in park—likely shows an area where people lived and worked.
- E. Even though people are gone, still have evidence they were here.
- F. Protected areas preserve human stories.
- G. Let's walk to another tree that tells story of other creatures that now make their home here.
- H. Walk to bear claw marks—wildlife habitat—even if don't see animal, see signs that they are there.
- I. The ultimate protection of an area is wilderness designation.
- J. What is wilderness? Think about as go to next stop—we'll discuss and define.
- K. Notice change in environments (boardwalk over wetland, enter into hemlock grove).

## IV. Wilderness - Bench After Boardwalk

- A. Does this feel like wilderness? Why/why not?
- B. Wilderness is an experience as well as place.
- C. One definition of wilderness overriding in USA, in the Wilderness Act.
  - I. Hand out definition of wilderness to visitor to read.
  - 2. Discuss word "untrammeled."
- D. Hand out maps of NWPS.
- E. Facts, figures, percentages.
  - Any wilderness in your state? Wilderness in all but six states in USA (Connecticut, Rhode Island, Kansas, Maryland, Iowa).
  - 2. How much of USA is wilderness? (4.5%—over 100 million acres; half is in Alaska).
  - NPS manages most wilderness.
    - a. 4 parks—which one most wilderness? (Shenandoah, Great Smokey Mountains, Yellowstone, Glacier).

- b. NPS has most, others have no designated wilderness (have proposed wilderness).
- c. Are the others wild? Fit definition of wilderness?
- 2. Not all wild lands designated wilderness.
- 3. Any less important?
- E. Let's experience part of wilderness, sense of solitude—silent walk until across bridge.
  - I. Does absence of human noise make the place feel more like wilderness?
  - 2. Think about what do you get from wild places.
  - 3. Count how many different sounds you hear.

## V. Bench After Bridge - Wilderness Benefits

- A. How was that?
  - I. What did you hear?
  - 2. How did you feel? Comfortable? At home?
- B. Is it worth having places where we can have these experiences?
- C. How do we benefit from wild places? (resources, experience, get away, future generations, history...).
- D. Walk to regenerating tree -represents Shenandoah's unique history of preservation.

# VI. Regenerating Tree (nursery log) - Junction With White Oak Trail - Return of Wild

- A. Nature returns after impact.
- B. In Shenandoah, conscious choice to let nature return—people gave up their homes (some willingly, some not) for the general public, us, to be able to experience a wild place; wilderness designation in Shenandoah in 1976.
  - I. Show Shenandoah National Park wilderness map.
  - 2. Strong voices and difficult choices led to designated wilderness here.
- D. Yet changes continue—our impacts.
- E. Walk along White Oak Canyon Trail—look for human influences.

## VII. On Trail in Hemlocks

- A. Hemlocks-wooly adelgid
  - 1. Seen in Pacific Northwest in mid-1920s.
  - 2. Appeared in Virginia in 1950.
- B. Impacts from far away
  - ı. Air-ozone
  - 2. Sound
- C. What can we do?
- D. Think about as walk on a bit.

# VIII. At Open Space in Woods - Postcards Home

- A. Ask them to go off trail, find a comfy spot, spend 5 minutes writing a postcard home—something they see, feel in moment, what is special about this place that needs to be preserved? How can we help preserve it?
- B. Collect cards to send home later.
- C. Post cards will arrive at your house after you return, but hopefully will bring back memories of this place that you have explored and become more familiar with.

# IX. Leave No Trace

- A. Go off trail back to Limberlost trail (over fire road).
- B. How can we go off trail so that we aren't hurting/impacting the land? So that no one would know we went that way?
  - 1. Watch your feet.
  - 2. Step on durable surface, not plants.
  - 3. Spread out, don't walk in line.
  - 4. Be quiet.

## X. At Trail

- A. How was that? Easy? Difficult?
- B. Watch your feet as we continue on trail. Stay on durable surface of trail, but also keep eyes open for other life besides our own.

#### XI. Conclusion - Last Bench

- A. The postcards will arrive to your home after you do—hope they bring back strong memory of place, time, special experience.
- B. Hope these memories inspire you to expand your sense of home, to include wild places so that you will be inspired to explore and protect.
- C. What places will you explore and protect that are special to you?
- D. What choices will you make to keep wild lands wild?
- E. Edward Abbey quote: "The love of wilderness is more than a hunger for what is always beyond our reach; it is also an expression of loyalty to the earth, the only home we shall ever know, the only paradise we ever need..."
- F. Or Howard Zahniser quote: "We have come to realize that we ourselves are creatures of the wild, that in wilderness we are at home, that in maintaining our access to wilderness, we are not escaping from life but rather are keeping ourselves in touch with our true reality, the fundamental reality of the universe of which we are part.
- D. Be wild, and be safe.

#### Wilderness Act:

Declares the "policy of the Congress to secure for the American people of present and future generations the benefits of an enduring resource of wilderness. A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain... an area of Federal Land retaining its primitive character and influence, without permanent improvements..." with "outstanding opportunities for solitude or a primitive and unconfined type of recreation."

—Congress, Wilderness Act 1964

#### 3. Interpretive Program Outlines - Shenandoah National Park, Interpretive Hike

Program Name: "Rose River Loop" - Laura Cheek, Education Specialist

Theme: Preserving wilderness is your choice.

**Goals:** Explore wilderness physically, mentally and emotionally; develop connection with Shenandoah National Park's wilderness; become stewards of all wild lands; understand that preserving wilderness is a choice people can make through their actions within and outside of designated wilderness.

**Objectives:** The audience will be able to:

- I. Explain a personal definition of wilderness.
- 2. Define wilderness according to the Wilderness Act.
- 3. Identify the National Wilderness Preservation System.
- 4. Explain the concept of Leave No Trace.
- 5. Identify and explain appropriate and inappropriate human use in wilderness according to Wilderness Act and/or their personal opinions.
- 6. Explain the benefits of wilderness in Shenandoah National Park.

**Purpose:** To introduce the concept and definition of wilderness and that exploration of wilderness leads to connection, awareness, understanding, and ultimately, stewardship.

## Materials and References:

Dip net and Styrofoam trays Hand lenses NWPS maps PH kit

Paper (large index cards) for Renga poetry

Pens

Quote cards

Shenandoah National Park wilderness map 1920 survey map and assessment review Wilderness Act quote

## Outline (by stop):

## I. Introduction - Fisher's Gap Parking Lot

- A. Introductions
- B. Welcome to park.
- C. Walk details (4 miles, 3 1/2 to 4 hours) going on "A Walk on the Wild Side."
- D. Safety bring water, snacks if desired.
- E. We will experience Shenandoah in a different way, a way most people do not.
- F. Go to a part that most people don't see—Shenandoah's wilderness.
- G. Please feel free to speak up, to ask questions, to explore physically and mentally.
- H. I will be asking many questions:
  - I. We won't be able to answer them all don't have time to!
  - 2. Offer you food for thought, to contemplate as you continue exploring
- I. Never know what we are going to discover.
- J. Kim Heacox quote— "In beautiful scenery you see more than you can absorb. In wilderness, you absorb more than you can see."
- K. Be ready for anything—keep senses open.

# II. Trailhead - Introduction

- A. Walk details again
- B. Safety (if necessary):
  - 1. Be careful.
    - a. Slippery rocks

- b. Wildlife bears, deer, snakes, ticks
- 2. Leave No Trace
  - a. Leave no evidence of your presence
  - b. How can we leave no trace?
  - c. Stay on trail
  - d. Pick up trash
  - e. Talk more about later on
- 3. Enjoy
- E. We will walk for about 15 minutes before first stop
- F. Think about your definition of wilderness
- G. Let me know if you think we have entered wilderness

## III. Horse Trail Junction - Designated Wilderness

- A. Are we there yet? Are we in wilderness?
  - I. What is wilderness to you?
  - 2. An experience as well as a place
  - 3. Actually we crossed the boundary into designated wilderness two switchbacks back.
  - 4. Feel any different?
- B. Designated wilderness
  - I. An ultimate definition of wilderness
  - 2. 1964 have visitor read part of Wilderness Act.
    - a. Discuss "trammeled."
  - 3. Wilderness is the most protection our government can give to public land.
  - 4.1976 80,000 acres designated in Shenandoah National Park.
  - 6. Think about:
    - a. Does Shenandoah fit this definition?
    - b. Why not wilderness in 1964? We will talk about later.
- C. Part of National Wilderness Preservation System show map.
- D. How much wilderness in USA? About 4.5%, 5 million acres, half in Alaska.
- E. Four federal agencies manage wilderness on public lands NPS, USFS, F&W, BLM.
  - I. NPS manages most.
- F. Which park has most wilderness? Shenandoah, Great Smoky Mountains, Yellowstone, Glacier?
  - I. Shenandoah does.
  - 2. Rest have none. Are they wild? Do they fit definition?
  - 3. Takes act of Congress to designate wilderness.
  - 4.Proposed wilderness in those other, but takes strong voices and difficult choices to designate wilderness.
  - 5. Strong voices and difficult choices here, but not elsewhere.
- E. Part of wilderness is solitude—to honor entrance into wilderness and to explore wilderness as an experience, walk next section in silence.
  - I. About 10 minutes Does it feel more like wilderness? How many different sounds do you hear? Will stop at next cement marker.

## IV. Next Cement Trail Marker

- A. How was that? What did you hear?
- B. Read Sigurd Olson silence quote or Sue Halpern quote.
- C. Able to hear and see animals that call this place home.
- D. Part of significance of wilderness is preservation of habitat.
- E. Natural quiet an issue in national parks and all wild places now how can we preserve natural quiet?
- F. Some things, such as sound, don't stop at wilderness boundary hard to keep some non-wilderness qualities out.
- G. Think about some other things might affect wilderness quality/experience that don't stop at the wilderness boundary while we walk to next stop.
- H. Keep senses open

## V. By Rose River - LNT - Human Effects on Wilderness From Without and Within

- A. What effects come from outside? Hold onto thoughts while we explore this stream.
- B. Stream study
  - I. How does this stream look? Let's take closer look.
  - Explore for five minutes and bring back what is found (descriptions fine too); be careful of self and creatures.
  - 3. Pass out nets and trays.
  - 4. Ask for help with PH test.
  - 5. Gather and share discoveries.
  - 6. Healthy or not? What would you expect?
    - a. Water quality
    - b. Acid rain/ozone effects—don't stop at wilderness boundary—choices we make outside of wilderness (i.e., cars we drive, products we buy) can affect health of wilderness.

## C. Hemlock wooly adelgid

- I. Another impact from outside affecting streams in roundabout way.
- Dark Hollow named because of shade from hemlock.
- 3. What has happened to hemlocks here?
- 4. Wooly adelgid facts
  - a. Description
  - b. Native to Asia first seen in North America in Pacific Northwest in early 1900s; seen in Virginia in 1950s; just made it into Maine.
  - c. Expect almost all hemlocks in lower elevations to die.
  - d. No natural predator
  - e. Causing streams to heat up, fish are affected, ground vegetation is changing.
  - f. What should we do? Nonnative species brought by humans, yet natural in wilderness? Think about if you were manager, what would you do?
  - g. Again, choices made outside of wilderness affect wilderness.
- D. Choices you make in wilderness make a difference too.
  - This area, with hemlocks dying and letting more light in, we would expect to see more ground vegetation, like across the stream—why isn't there?
  - 2. Human trampling
    - a. I took you off the path.
    - b. Have people been here before?
    - c. What impact could this trampling have on the stream? erosion = turbidity
  - 3. "Durable surface" better to sit and stand on rocks than soil.
  - 4. We are going back up to trail. How can we have the least amount of impact returning?
    - a. Stay on durable surface rocks.
    - b. Disperse or stay on already impacted social trail.
    - c. Reduce possibility of erosion (no cutting switchbacks).
  - 5. Going to be walking by waterfalls—we'll pause, but not walk down—look for reasons why when we get there—has to do with reasons we talked about here.
  - 6. Think about how choices we make affect wilderness quality.

## VI. At Cement Trail Post (at confluence of Rose River and Hog Camp) - People in Wilderness

- A. Why didn't Shenandoah classify as wilderness in 1964
  - I. Shenandoah was actually proposed in the first draft of the Wilderness Act (show map).
  - 2. People living here at authorization, still lots of evidence of impact.
  - 3. Can there be evidence of past human use in wilderness area? What about prehistoric?
  - 4.Forty years after establishment of park, Congress passed legislation designating wilderness in Shenandoah.
    - a. Show Shenandoah National Park wilderness map.
    - b. Forty percent of Shenandoah National Park designated as a mosaic (why? Politics...)
  - 5. Read Superintendent Jacobson quote (strong voice for wilderness here).
  - 6. What is value of wilderness in the East? More or less equal to wilderness in Alaska?

- B. Continues to be impacted here.
  - I. Many visitors (point to "no camping" sign).
  - 2. What is human place in wilderness?
  - 3. Would it be a good thing to have a designated area where no human ever goes?
  - 4.In Croatia there are two national parks where only researchers are allowed, no recreation.
  - 5. Look for signs of impact as we continue on.

# VII. At Bridge - How Deal With Impact

- A. What did you see?
  - I. Copper mine in late 1800s
    - a. Tailings "waste" rock left behind from copper mining.
    - b. Cement block part of mine operations too heavy to carry out so left behind?
  - 2. Bridge we just walked over
    - a. New old one washed out in flood of 1995.
    - b. Evidence of powers out of human control part of wilderness.
    - c. But created dilemma well used trail, yet now in wilderness what should be done?
    - d. What would you have done if you were manager?
      - 1) Discuss reactions.
    - e. Park management decided to replace, used helicopter.
    - f. Typically no mechanized equipment allowed. Trail crew here uses hand-powered tools (except for special considerations for safety and resource preservation i.e., use chain saw to clear trail so that hikers don't trample vegetation going around fallen log).
    - g. Constant debates about use in wilderness (what if someone hurt? etc.)
    - h. Always will be questions and compromises What are your opinions, feelings, and decisions? What level of wilderness do you want to see preserved? What is the balance between preservation and enjoyment?
    - i. Continue to think about Your voices are the ones that must be strong now.
    - j. Read Aldo Leopold quote.
  - 3. Now you must be strong physically We are about to experience another component of wilderness—"physical challenge."
  - 4. Read Muir quote.

#### VIII. Flat Rocks Along River - Wilderness As Renewal

- A. Now let's take some time to let go of the controversial issues and explore a different aspect of wilderness, as a place for inspiration, reflection, and relaxation.
- B. Wilderness experience has inspired many people to try to represent through art or writing and to work for the preservation of such experiences.
- C. Introduce and structure Renga poetry.
  - An opportunity to be aware of this place in this moment, to record your observations, thoughts, and feelings.
  - 2. Sit visitors down in circle (or two circles if many people); hand out paper and pens; ask each person to write down one line—it doesn't have to be a complete sentence—a thought, feeling, observation; then pass the paper on to the next person. Take the paper from the person on the other side, and add another line under the line they wrote; continue writing and passing paper until receive original paper back.
- D. Conclude with thoughts about opportunity for spiritual renewal, for "re-creation", for peace, calm, reflection.
- E. Hold onto poems, we will share a few of the poems during breaks as we continue up hill.

#### IX. Hemlock On Top of Rock

- A. Share poems and comment.
- B. Talk about wonder of unknown, wonder of unseen. Do we have to know what it is to appreciate it? Do we have to see it to appreciate it?
- C. Read Sigurd Olsen quote.

## X. At Fire Road - Conclusion

- A. Are we still in wilderness?
  - No out of designated wilderness.
  - 2. Show map of trail with marked wilderness boundary.
- B. Has your definition of wilderness changed? Have you "absorbed more than you can see"?
- C. Wilderness has been, and still is, a choice.
  - I. Decisions in the past have resulted in wilderness here.
- D. Show survey map of 1920s with houses marked.
  - I. Many people lived here, took care of place according to their time.
  - 2. Now here we are.
- E. Show assessment of land monetary value assigned.
  - I. In 1920s this is the value put on the land.
  - 2. What value does it have now? To you? To the wildlife? To the world? To the future?
    - a. Humans have made difficult choices and sacrifices to invite wilderness back as the ultimate protection—a place of both great freedom and great restraint.
  - 3. Now the choice is up to us, up to you.
    - a. Your decisions both inside of wilderness (where you put your feet, what you take out or leave behind) and outside of wilderness (what car you drive, what legislation you support) affect the health and preservation of wilderness.
    - b. What choices will you make?
- F. Fire road will lead us back to Skyline Drive, a transition out of wilderness, though hopefully you will take some of the wilderness back within you.
- G. Thanks for coming! Be wild, and be safe.

# XI. Give visitors options for further exploration on their own/walk with visitors back to Fishers Gap overlook.

#### **Quotes Referenced:**

Declares the "policy of the Congress to secure for the American people of present and future generations the benefits of an enduring resource of wilderness. A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain... an area of Federal Land retaining its primitive character and influence, without permanent improvements..." with "outstanding opportunities for solitude or a primitive and unconfined type of recreation."

—Congress, Wilderness Act 1964

How often we speak of the great silences of the wilderness and of the importance of preserving them and the wonder and peace to be found there. When I think of them, I see the lakes and rivers of the North, the muskegs and expanses of tundra, the barren lands beyond all roads. I see the mountain ranges of the West and the high, rolling ridges of the Appalachians. I picture the deserts of the Southwest and their brilliant panoramas of color, the impenetrable swamplands of the South. They will always be there and their beauty may not change, but should their silences be broken, they will never be the same.

-Sigurd Olson

People talk about the silence of nature, but of course, there is no such thing. What they mean is that our voices are still, our noises are absent.

-Sue Halpern

We recognized, through its relatively small size, its already established levels and patterns of visitor use... that our wilderness area was not of the highest order...while our wilderness is not supreme, we will not allow its primeval character, and its opportunities for solitude, inspiration, and physical and mental challenges to decline. Furthermore, we will strive, and might be able, to improve its overall quality.

—Superintendent Jacobson, Shenandoah National Park, 1976

Thus always does history, whether of marsh or market place, end in paradox... all conservation of wilderness is self-defeating, for to cherish we must see and fondle, and when enough have seen and fondled, there is no wilderness left to cherish.

-Aldo Leopold, A Sand County Almanac

Climb the mountains and get their good tidings. Nature's peace will flow into you as sunshine flows into trees. The winds will blow their own freshness into you, and the storms their energy, while cares will drop off like autumn leaves.

-John Muir

I named this place Listening Point because only when one comes to listen, only when one is aware and still, can things be seen and heard. Everyone has a listening-point somewhere. It does not have to be in the north or close to the wilderness, but some place of quiet where the universe can be contemplated with awe.

—Sigurd Olson, Listening Point

#### 3. Interpretive Program Outlines - Shenandoah National Park, Interpretive Slide Program

Program Name: "The Wild Side of Shenandoah" - Laura Cheek, Education Specialist

Theme: Strong voices and difficult choices are vital to wilderness preservation.

**Goals:** Audience will understand the importance of federally designated wilderness in Shenandoah, recognize their connection to wild lands, and be inspired to become stewards of wild lands.

**Objectives:** The audience will be able to:

- I. Explain own definition of wilderness.
- 2. Relate three different perspectives of wilderness throughout history.
- 3. Identify three strong voices for wilderness preservation.
- 4. Define wilderness according to the Wilderness Act.
- 5. Identify the National Wilderness Preservation System.

**Purpose:** To connect with wild places on an emotional level. Knowing that protected preserved natural land exists is important to our individual and national psyche; we can perpetuate and protect wild lands by the active choices we make in our daily lives.

#### **Materials and References:**

National Wilderness Preservation System map

National Park System map

Quote cards for audience to read (Bradford, anonymous, Muir (2), Wilderness Act, Eastern Wilderness Areas Act, Jacobson)

#### **Outline**

#### I. Introduction

- A. Laura Cheek, welcome, talk "The Wild Side of Shenandoah"
- B. Words from our sponsor The Overlook
  - 1. Wilderness article
  - 2. Wilderness programs
  - 3. Jr. Ranger
- C. Safety information (if necessary)
  - I. For how many is it the first time in Shenandoah National Park?
  - 2. For how many is it the first night in Shenandoah National Park?
  - 3. Rest of you can help me out.
    - a. What are some things to be careful about?
    - b. Deer, bear, snakes, ticks, fire, etc.
- D. Find out where audience is from.
  - I. Name a National Park Service site in your state rest of us guess state.
    - a. Only one state has none Delaware.
  - 2. Raise your hand if you know of a designated wilderness area in your state.
    - a. Only six states have none CT, RI, MD, DE, KA, IA.
- E. At this moment, we are very near some of the most amazing, unique wilderness in USA.
  - Bottom of Dark Hollow (or identify according to amphitheater location)
    - a. No sign, no neon lights, no fence, might not even feel any different.
    - b. Yet special place our society has decided has unique value, and has granted special protection to.
  - 2. Forty percent of Shenandoah National Park is designated wilderness.
    - a. This is what we'll talk about tonight -how unique, how got here, how it is a part of you.
    - b. How many of you think of Shenandoah as wilderness?
      - 1) May or may not fit your own definition of wilderness.
    - c. Specific definition of wilderness here, designated wilderness, which we will define later.

- d. Designated wilderness is a designated place, with boundary around it, yet wilderness can be an experience too, or both, many definitions abound.
- e. What is wilderness? We all have own definition. Let's talk about that first.

#### II. Definitions of wilderness

- A. Audience definitions
  - I. Summarize (i.e., experience, place, natural, without humans, etc.)
- B. My definition Alaska
  - I. Explain my story.
  - 2. A place and experience.
  - 3. Shenandoah National Park is a small park, close to D.C., millions of visitors.
  - 4.Shenandoah National Park changed my definition of wilderness maybe change yours too.
- C. Shenandoah's wilderness more intriguing and more unique than Alaska wilderness.
  - I. As unique as your big toe.
  - 2. You'll figure out why by end of program.
  - 3. To find out why secret of SNP is in your big toe, we need to find out why wilderness is here.
  - 4. Wiggle your big toe, we'll tell the story of Shenandoah's wilderness.
    - a. It's a result of strong voices and difficult choices.

#### III. History

- A. Has this area always been wilderness?
  - I. No had a series of changes, natural and human, that have affected landscape.
  - 2. Let's take a look through time at what Shenandoah National Park was like.
- B. Thousands of years ago
  - I. Was this wilderness? Were people here?
  - 2. Native people lived here, made use of resources, left little evidence, not many people.
  - 3. Probably didn't think of this as "wilderness." It was their home.
- C. 400 years ago, early 1600s
  - I. Come forward in time to when wilderness became a word, had a definition.
  - 2. What was happening in Virginia in the early 1600s?
  - 3. European settlement on coast
  - 4. Concept of wilderness
    - a. How think of wilderness?
    - b. Audience reads William Bradford quote.
    - c. Audience reads Anonymous quote.
    - d. Feared, to be conquered, not preserved, for most part.
    - 5. How could definitions of wilderness change from then to now?
- D. Mid 1800s, settlers move West
  - I. Lured by endless lands, the frontier, the American dream and ideal, uniquely American.
  - 2. Homesteading
- E. 1890—paper read at World Exposition in USA stating "frontier gone", no wilderness left.
  - Concern grew, mostly in growing cities, mainly in East, thought of losing something—a place and experience uniquely American.
  - 2. Strong voices spoke up for preserving lands still wild.
    - a. One voice in particular John Muir.
      - 1) Story of Muir
      - 2) Audience reads Muir quotes.
    - b. Resulted in setting aside federal land for preserves and parks National Parks and Forests.
    - c. Never came to Shenandoah, but without his voice we wouldn't be at this park tonight.
- F. Where were most national parks in early 1900s? Out West.
  - I. People went, but difficult to get to.
  - 2. Push for eastern parks committees formed, voices spoke up.
  - 3. What was the result? Shenandoah National Park.
- G. Shenandoah National Park
  - I. Authorized in 1926
    - a. What was this place like? Was it still wilderness?

- b. No. Several thousand people lived here.
- c. No bear, deer, or wild turkey here, though native to these mountains.
- d. People moved up in 1800s as people moved out West.
- e. People gave up their homes for this park, for this wilderness—its own fascinating story.
- 2. 1935 established as Shenandoah National Park, conserved for future generations.
  - a. Recreation and re-creation
  - b. Was it wilderness? People had left....
  - c. First Superintendent of Shenandoah made difficult choice.
    - 1) Was told to protect some homes and structures.
    - 2) Said no, let nature return and reign.
    - 3) Still controversial.
  - d. Voices for protected wild lands growing stronger still—change from 1600s!
- H. In 1920s first federal land declared wilderness, Gila National Forest, promoted by forester Aldo Leopold—but what is wilderness?
  - I. Definitions debated, all the way to Congress.
  - 2. Resulted in congressional act, mainly written by wilderness advocate Howard Zahniser.
- I. The Wilderness Act 1964
  - I. Audience reads quote.
  - 2. This is designated wilderness.
  - Protection beyond what NPS or USFS can provide—must be managed with different focus, different goals.
  - 4. We practice restraint as managers and individuals.
  - 5. Must be approved by Congress.
  - 6. Started National Wilderness Preservation System.
  - 7. Places our society deemed especially valuable and worthy of protection.
  - 8. Did Shenandoah fit?
    - a. Some said yes, some no.
    - Some strong voices said yes—Potomac Appalachian Trail Club, Wilderness Society, Superintendent at time.
    - c. Congress said no.
- J. Eastern Wilderness Areas Act 1975
  - I. Congress reinforced Wilderness Act definition of wilderness by restating that land did not have to be "pristine" but that imprint of man's work had to be "substantially unnoticeable" and the area "primarily affected by the forces of nature."
  - 2. Recognized importance of preserving representative parts of all ecosystems, especially near populated areas, as the ultimate land protection.
  - 3. Recognized importance of preserving cultural history.
  - 4. Audience reads quote.
  - 5. Did Shenandoah fit? Yes.
  - 6. 1976 approx. 80,000 acres designated wilderness, forty percent.
    - a. Managed by park, but added protection of Wilderness Act.
    - b. Audience reads Jacobson quote.
    - c. A place our society has deemed especially valuable and worthy of protection, speaking up for and making sacrifices for.
    - d. In only 40 years, this area changed from non-wilderness to wilderness, nature reclaiming the land, evidence of human expansion diminished.

#### IV. Our Role

- A. 25 years have passed since wilderness established here, society continues to change.
  - I. Who will be the strong voices now?
  - 2. You—please, all that are able, stand up for a few minutes.
- B. Why need to speak up for wilderness?
  - Protected but not guaranteed as society's needs and demands continue to change and different priorities prevail.
  - 2. Not much left to designate, especially with continuing pressures on natural lands.
  - 3. Some places wild, but not protected.

- a. Out of following four parks, which one has most wilderness?
- 1) Shenandoah, Great Smoky Mountains, Yellowstone, Glacier?
- b. Answer Shenandoah, the rest have proposed, but not designated, why?
- 1) Political needs strong voices and difficult choices.
- 2) Congress hasn't acted on it yet.
- 3) Have proposed wilderness areas, areas with pending wilderness designation.

#### 4. How much wilderness in USA?

- a. All audience represents land mass of USA (approximately 4.6 billion acres).
- b. Sit-down activity
- 1) Have all audience sit down (by clothes color or sitting location) until about four percent of audience is left standing i.e., if 100 in audience, 4 left standing).
- Those still standing represent the amount of designated wilderness in USA—about four percent.
- d. Half of those standing, sit down, because two percent in Alaska 50 million acres.
- e. Half of those left standing, sit down (or one person left sit down but hold up arms and legs), because less than on epercent east of Mississippi.
- f. Last person point to own big toe, because that small part, size of big toe, represents the amount of designated wilderness in Shenandoah compared to the entire United States.
- g. That's why Shenandoah's wilderness is as unique and valuable as your big toe
  - 1) Analogy: you don't always see your big toe, but it's there; you don't always think about your big toe, but it's there for you when you need it; don't always take care of your big toe, but it sure helps you walk forward and balance.
  - 2) The same is true for Shenandoah's wilderness: you don't always see the wilderness, but it's there; you don't always think about the wilderness, but it's there for you when you need it; you don't always take care of the wilderness, but it sure helps us move forward and to balance our society's conflicting desires.
  - 3) Like your big toe, Shenandoah's wilderness is part of a bigger system, the National Wilderness Preservation System, with designated wilderness in almost every state.
  - 4) Places of unique value with special protection.
  - 5) Not only places that preserve clean water, wildlife in natural habitat, endangered species, plants, but preserves an experience for us, even if we never go there physically.
- 5. How can you play a part?
  - a. Think of your favorite wild place. Is it designated wilderness? If not, should it be so? What will you do to keep your favorite wild place wild, as place and an experience?
  - b. Even though I am no longer in Alaska, it is a wild place that will always be a part of me, and I a part of it.
  - c. Now in SNP and now know Shenandoah has amazing wilderness, especially because it is in such a small park, 1 1/2 hours from DC, in a place millions of people visit every year.
  - d. My first summer here, I went into Shenandoah's wilderness and camped out overnight by myself—I saw no other people, I heard mostly wild animals with few planes, I felt powers beyond my own, I experienced unknown and fear (rattlesnakes and thunderstorms). I thought about how I fit in, what I get from wild places and what I can give to them.
  - e. Thought maybe it is time for a new concept of wilderness—not think of wilderness as something separate from us, a boundary put around, but as a part of us, and us a part of wilderness, as home—a place to respect and take care of—as it was thousands of years ago, whether AK, SNP, or your own backyard.
  - f. All of our favorite wild places unique, yet Shenandoah's wilderness is exceptionally unique—it reflects our society's changing definitions of wilderness from a dismal hideous place to a place worthy of protecting, of making difficult choices for and speaking up strongly for.
  - g. 100 years ago, an advocate of preserving natural places and experiences, Henry David Thoreau, stated, "In wildness is the preservation of the world."
  - h. More recently, an advocate of wild lands in the southeastern US, Wendell Berry, wrote, "In civilization is the preservation of wilderness."
  - i. It is up to you.

j. As you leave, return to your home, walk on your big toe, think of the uniqueness of Shenandoah's wilderness, think of the importance of your own favorite wild place, and keep in mind this final question in the words of poet Mary Oliver: "Tell me, what is it you plan to do with your one wild and precious life?"

#### **Quotes Referenced:**

| Wilderness is a damp and dreary place where all manner of wild beasts dash about uncooked!  —Anonymous  |
|---|
| What could they see but a hideous and desolate wilderness, full of wild beasts and wild men?  —William Bradford   |
| Climb the mountains and get their good tidings. Nature's peace will flow into you as sunshine flows into trees. The winds will blow their own freshness into you, and the storms their energy, while cares will drop off like autumn leaves.  |
| —John Muir  |
| Everybody needs beauty as well as bread, places to play in and pray in, where Nature may heal and cheer and give strength.  |
| —John Muir  |
| Declares the "policy of the Congress to secure for the American people of present and future generations the benefits of an enduring resource of wilderness. A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain an area of Federal Land retaining its primitive character and influence, without permanent improvements" with "outstanding opportunities for solitude or a primitive and unconfined type of recreation."  —Congress, Wilderness Act 1964 |
| Areas shall be managed to promote and perpetuate the wilderness character of the land and its specific values of solitude, physical and mental challenge, scientific study, inspiration, and primitive recreation"  —Congress, Eastern Wilderness Areas Act 1975  |
| We recognized, through its relatively small size, its already established levels and patterns of visitor use that our wilderness area was not of the highest orderwhile our wilderness is not supreme, we will not allow its primeval character, and its opportunities for solitude, inspiration, and physical and mental chal-   |

lenges to decline. Furthermore, we will strive, and might be able, to improve its overall quality.

-Superintendent Jacobson, Shenandoah, 1976

#### 3. Interpretive Program Outlines - Shenandoah National Park, Resource Immersion Program

#### Program Name: "Explore Wild Shenandoah" - Laura Cheek, Education Specialist

**Theme:** Shenandoah National Park's designated wilderness becomes more than a legal line on a map after people experience its physical characteristics and forge emotional connections to the ideals which created it.

**Goal:** Through their personal exploration of Shenandoah's designated wilderness, visitors will gain an appreciation for wilderness and will become active advocates of wild lands.

**Objectives:** At the end of the program, visitors will be able to:

- 1. State the purpose and meaning of the 1964 Wilderness Act.
- 2. State an individual definition of wilderness.
- 3. State the unique significance of Shenandoah's wilderness.
- 4. List at least 4 benefits of designated wilderness.
- 5. Identify the National Wilderness Preservation System.
- 6. List at least four ways they can contribute to the preservation of wild lands.

**Purpose:** Wilderness as a resource benefits all people emotionally, psychologically, mentally and physically. Getting into and exploring wilderness on all of these levels increases one's appreciation and support of wilderness.

#### Materials and References:

Dictionary

Large dry erase board or blackboard

National Wilderness Preservtion System maps

Paper

Pens

Folders containing:

"Journal" (made for participants to take and keep, with inspirational quotes)

Copy of Wilderness Act

Maps of Shenandoah National Park districts showing trails and designated wilderness

Leave No Trace reference tag

#### Outline:

#### I. Introduction - Morning Meeting at Visitor Center

- A. Welcome
- B. About myself, Laura Cheek
- C. Program details
- D. Theme
  - I. How many of you have been to Shenandoah National Park before this visit?
  - 2. How many of you have been in Shenandoah National Park's wilderness area before?
  - 3. That's what I encourage you to do today—to go wild and explore Shenandoah's wilderness—physically, mentally, and emotionally.
  - 4.Before sending you out into the wilderness, I want to share with you some thoughts and information about Shenandoah's wilderness, and hear some of your thoughts.
  - 5. First ask you to write down a few things.

#### II. Map Activity

- A. Hand out paper and pens.
- B. Ask participants to write down answers to following questions (have questions written on board for all to see):
  - I. What is wilderness?
  - 2. How much of the USA is wilderness?

- 3. Write down the following NPS sites Yellowstone, Glacier, Great Smoky Mountains, and Shenandoah.
- 4. Is wilderness important? Why or why not?
- C. What is wilderness?
  - I. Ask participants for answer to first question. Write phrases on board.
  - 2. State that wilderness is all that and more.
    - a. Wilderness is an experience and a place.
    - b. Definitions and perspectives of wilderness have changed throughout history.
  - 3. USA has a definition of wilderness, written in 1964. Anyone know the amazing event that happened that year? President Lyndon Johnson signed the Wilderness Act, for "the permanent good of the whole people."
  - 4. Have someone read excerpt of Wilderness Act (section 2c first sentence).
    - a. Discuss word "trammeled."
    - b. Have someone look up in dictionary and read.
  - 5. What does this mean? We'll explore that later.
- D. National Wilderness Preservation System
  - I. The Wilderness Act created a system of wilderness, the National Wilderness Preservation System—a system that encompasses the entire United States, has been added to in the succeeding 37 years, now congressionally designated wilderness in almost every state in the USA.
  - 2. Is there wilderness is your state?
  - 3. Hand out maps of NWPS for participants to find their state and wilderness in it.
  - 4.Look at entire USA. How much wilderness would you say is in the country?
    - a. Take guesses.
    - b. Have everyone hold up hand—this represents whole USA—point to tip of little finger—that's how much designated wilderness is in USA, about 4.5%. Half is in Alaska.
- E. Shenandoah wilderness
  - I. NPS manages most wilderness.
  - 2. Which of the four parks you wrote down do you think has the most wilderness? (Don't peek on map!)
  - Shenandoah does! Forty percent of Shenandoah National Park is designated wilderness, the others have none.
    - a. Why don't they have any? Are they wild? Yes, have components that you all listed and that are written in the wilderness act. They have proposed wilderness, yet it takes an act of Congress to create designated wilderness, the ultimate protection our country can give to land.
- F. What does this ultimate protection mean?
  - I. Wilderness managed in specific ways, written into Wilderness Act.
    - a. Show list of do's and don'ts (from section 4c and 4d).
    - b. This is what you can expect when you enter into a wilderness area.
    - c. Though responsibility up to visitors too—whether they enter into designated wilderness or not
      —all of our actions, inside and outside of wilderness effect the character and integrity of
      wilderness.

#### III. Personal Exploration

- A. The last question is up to you to answer.
- B. Now is your time to go out into the wilderness, to explore the opportunities of "solitude, physical and mental challenge, scientific study, inspiration, and primitive recreation."
- C. Hand out folders of information.
  - Inside you will find maps of Shenandoah National Park, complete with overlooks, trails and designated wilderness area.
  - 2. You now can choose one, or more, of these overlooks to stop at or trails to explore. You can hike the whole route, go a little way, find a rock to sit on by a stream or with a view and contemplate. The way you explore is up to you.
  - Inside is a small journal for you to take notes, write thoughts, poetry, questions, draw images, write your own wilderness act.
    - a. There are quotes to contemplate and questions to guide your thoughts printed on the paper.

b. If your schedule allows, please meet back here at \_\_\_\_\_ to share our thoughts and discoveries, and I'll let you know where you can find more information about wilderness.

#### D. Safety tips

- I. Be careful where you step—watch for wildlife, especially if you are quiet, you will have opportunity to see much more.
- 2. Tick precautions.
- 3. Bring plenty of water, snacks, dress appropriately, bring raingear.
- 4. Please follow the principles of Leave No Trace.
  - a. Especially principle #2: Try to stay on durable surfaces. Stay on the trail, but if you go off, step on rocks or hard ground, not on fragile plants.
  - b. Also #7: Be considerate of other visitors, take breaks away from trails (make sure it is a durable surface!)
- 5. Be wild and be safe!

#### **Quotes for Journal Pages**

Areas shall be managed to promote and perpetuate the wilderness character of the land and its specific values of solitude, physical and mental challenge, scientific study, inspiration, and primitive recreation."

—Congress, Act, 1976

[Wilderness] is good for us when we are young, because of the incomparable sanity it can bring briefly, as vacation and rest, into our insane lives. It is important to us when we are old simply because it is there – important, that is, simply as idea.... We simply need that wild country available to us, even if we never do more than drive to its edge and look in. For it can be a means of reassuring ourselves of our sanity as creatures, part of the geography of hope.

—Wallace Stegner, Coda: Wilderness Letter, 1960

The wilderness itself is historic... the historic process that gave protection and allowed the return of wild nature is continuing... Shenandoah is both a preserving and a creating park.

—Darwin Lambert, Administrative History of SNP, 1979

Shenandoah is one of the great promises of the Wilderness Act, that we can dedicate formerly abused areas where the primeval scene can be restored by natural forces, so that we can have a truly National Wilderness Preservation System... that there are no area in the eastern US that can meet the test of qualification under the definition of wilderness in the Wilderness Act is just not so.

—Senator Frank Church, Senate Subcommittee Hearing, 1972

Wilderness is a damp and dreary place where all manner of wild beasts dash about uncooked!

—Anonymous

As I sat there on the rock I realized that, in spite of the closeness of civilization and the changes that hemmed it in, this remnant of the old wilderness would speak to me of silence and solitude, of belonging and wonder and beauty. Though the point was only a small part of the vastness..., from it I could survey the whole. While it would be mine for only a short time, this.. would grow into my life and into the lives of all who shared it with me.

-Sigurd Olson, Listening Point

In scenery you see more than you can absorb. In wilderness you absorb more than you can see.

-Tom Detrich

We recognized, through its relatively small size, its already established levels and patterns of visitor use ..that our wilderness area was not of the highest order.. while our wilderness is not supreme, we will not allow its primeval character, and its opportunities for solitude, inspiration, and physical and mental challenges to decline. Furthermore, we will strive, and might be able to improve its overall quality.

—Superintendent Jacobson, 1976

Thus always does history, whether of marsh or market place, end in paradox .. all conservation of wilderness is self-defeating, for to cherish we must see and fondle and when enough have seen and fondled, there is no wilderness left to cherish. —Aldo Leopold, A Sand County Almanac Wilderness is two things: fact and feeling. It is a fund of knowledge and a spring of influence. It is the ultimate source of health——terrestrial and human. -Benton MacKaye, Scientific Monthly, 1950 Our expansive civilization... will eventually modify for human exploitation every last area on earth - except those that through human foresight and wisdom have been deliberately set aside for preservation. -Howard Zahniser There is a need in our planning to secure the preservation of some areas that are so managed as to be left unmanaged—vareas that are undeveloped by man's mechanical tools and in every way unmodified by his civilization. -Howard Zahniser To know wilderness is to know a profound humility, to recognize one's littleness, to sense dependence and interdependence, indebtedness, and responsibility. —Howard Zahniser We have to come to realize that we ourselves are creatures of the wild, that in wilderness we are at home, that in maintain ... our access to wilderness, we are not... escaping from life but rather are keeping ourselves in touch with our true reality, the fundamental reality of the universe of which we are part. —Howard Zahniser The true wilderness experience is one, not of escaping but of finding one's self by seeking the wilderness. —Howard Zahniser Climb the mountains and get their good tidings. Nature's peace will flow into you as sunshine flows into

-John Muir

A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise.

—Aldo Leopold, A Sand County Almanac

#### 4. Education Curriculum - NPS Alaska Region Support Office

Title: The Culture of Wilderness WebQuest

**Overview:** Presently under development, "The Culture of Wilderness" WebQuest focuses on wilderness in Alaska and wilderness in national park units in Alaska. This program is based on national curriculum standards and includes emphasis on how the Alaska National Interest Lands Conservation Act defines the many exceptions for managing wilderness is Alaska.

#### Objectives:

- Examine the various concepts of wilderness, including points of view from people whose ancestors have been part of the landscape for tens of thousands of years and who may not even have a word for "wilderness" in their own language (e.g. Inupiaq).
- Connect students in a variety of locations and environments with one another through the Internet to
  facilitate an exchange about wilderness and what it means to them. For example, to a youngster in New
  York City, wilderness might be Central Park. To a youngster in Anuktuvuk Pass, it may his or her
  "homeland." To suburban Philadelphia youths, wilderness might be a place to go for an exciting
  backpacking or rafting trip in the summer, etc. Of course, many students will have no concept of
  wilderness or will not have thought about it before.
- Provide a context for a discussion about the meaning of wilderness through readings about of the history
  and background of wilderness (including the law and even the congressional record pursuant to passage
  of the Wilderness Act). Internet links and other references are provided to assist students in locating
  such information.
- Examine current planning documents related to wilderness that are on public review and prepare
  comments on proposed alternatives in an effort to combine wilderness with civic involvement and to
  help students understand that they have a responsibility to become involved in the public process.
  Backcountry management plans for Alaska national parks are the focus with an emphasis on civics and
  citizenship curriculum. Teachers may choose to work with students on review and comment regarding
  local issues in their own communities.

## 4. Education Curriculum – Black Canyon of the Gunnison National Park and Curecanti National Recreation Area

#### **National Park Service Mission**

... to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.

Black Canyon of the Gunnison National Park and Curecanti National Recreation Area Outreach Education is committed to: Creating an awareness and fostering an appreciation for the mission of the National Park Service and the natural, cultural, and historic resources of Curecanti National Recreation Area and Black Canyon of the Gunnison National Park.

#### **Education Lesson Plan**

Curriculum enhancing activities designed to complement national and state content standards across a variety of disciplines.

Title: The Magnitude of Wilderness

Grade Level: Sixth through Eighth Grade

Time Length: 60 minutes

Subject Areas: Science, Mathematics, Geography

**Teacher:** Two NPS Education Specialists

#### **Colorado Content Standards:**

#### Science

Standard I. Students understand the processes of scientific investigation and design, conduct, communicate about, and evaluate such investigations. Students are able to use appropriate tools, technologies, and measurement units to gather and organize data; use metric units in measuring, calculating, and reporting results; communicate results of their investigations in appropriate ways (for example, written reports, graphic displays, oral presentations).

#### Geography

Standard I. Students know how to use and construct maps, globes, and other geographic tools to locate and derive information about people, places, and environments.

Standard 1.1 Students know how to use maps, globes, and other geographic tools to acquire, process, and report information from a spatial perspective and are able to interpret and construct maps, globes, models, charts, and geographic databases.

Standard 5. Students understand the effects of interactions between human and physical systems and the changes in meaning, use, distribution, and importance of resources.

Standard 5.3 Students know the changes that occur in the meaning, use, location, distribution, and importance of resources and are able to describe why people have different viewpoints with respect to resource use.

#### **Mathematics**

Standard I. Students develop number sense and use numbers and number relationships in problem-solving situations and communicate the reasoning used in solving these problems. They are able to use relationships among fractions, decimals, and percents, including the concepts of ratio and proportion, in problem-solving situations.

Standard 4. Students use geometric concepts, properties, and relationships in problem-solving situations and communicate the reasoning used in solving these problems. Students are able to solve problems involving perimeter and area.

#### **National Content Standards:**

#### Geography

- Standard: I. Understands the characteristic and uses of maps, globes, and other geographic tools and technologies.
- Level III: Middle School/Jr. High (Grades 6-8)
- Uses thematic maps (e.g., patterns of population, disease, economic features, rainfall, vegetation).

#### Mathematics

- Standard: 4. Understands and applies basic and advanced properties of the concepts of measurement.
- Level III: Middle School/Jr. High (Grades 6-8)
- Understands formulas for measures (e.g., area, volume, surface area).
- Selects and uses appropriate estimation techniques (e.g., overestimate, underestimate, range of estimates) to solve real-world problems.

Theme: Wilderness areas in terms of size, proximity to population centers, and natural features.

NPS Focus: Public Law 39-535 (Organic Act), Public Law 88-577 Stat. 890 (Wilderness Act), Eastern Wilderness Areas Act, Public Law 95-250 (Redwood National Park Expansion Act), Vail Agenda Education Committee Report (Strategic Goal #2; Action Plan 16) and (Strategic Goal #3; Action Plan 52,62), Curecanti and Black Canyon Themes: Natural Resources/Wilderness

Environmental Concepts: Everything must fit how and where it lives (community). There is no free lunch (energy flow).

**Environmental Learning Hierarchy:** Ecological principles, problem solving processes, decision-making procedures.

Materials: Federal Lands in the Fifty States Map, National Geographic Society (1996). The National Wilderness Preservation System 1964-1999 Map, National Geographic/Trails Illustrated (1999), state highway map, topographic map, graph paper for each student. The Wilderness Act of 1964 (P.L. 88-577, 78 Stat. 890; 16 U.S.C. 1121 (note), 1131-1136).

#### I. Instructional Outcomes

Knowledge level: Students will be able to create an accurately scaled, thematic map based on wilderness areas managed by four federal agencies and be able to calculate area in total acreage and hectares. Comprehension level: Students will be able to identify the locations and explain the boundaries of wilderness areas and to compare/contrast size using estimation and scale/ratio to show total acreage.

#### II. Anticipatory Set

What is wilderness? Wilderness is a place where the presence of humans is not evident. There are no roads, buildings, or other structures built by humans. No mechanized equipment is allowed in the wilderness. No ATVs, chainsaws, or mountain bikes. It is a place where we can see the world in its natural state. It is land that is untrammeled. What does untrammeled mean? Let's look it up in the dictionary. Untrammeled, U-N-T-R-A-M-M-E-L-E-D. Hmmm. It's not in the dictionary. What part of this word might we find in the dictionary? Let's look it up. T-R-A-M-M-E-L-E-D. Caught, confined, shackled. So untrammeled means something that is not confined or restricted. Wilderness!

Wilderness is land retaining its primeval character. What does that mean? Primeval, P-R-I-M-E-V-A-L. Let's look up this word in the dictionary. Primeval, primitive, belonging to the first or earliest period of time. It is where natural processes are still occurring and human activity is limited. Humans can only be visitors. This allows us to experience wild places that have remained relatively unchanged throughout history.

Where can we find wilderness? Wilderness areas are found in wetlands, grasslands, swamps, deserts, forests, tundra, and mountain peaks. There are over 630 wilderness areas located in almost every state within our country. There are only six states that do not have wilderness. Can you guess which ones they are? Kansas, Iowa, Rhode Island, Delaware, Maryland, and Connecticut. The largest wilderness area is in the largest state, Alaska. It is in the largest National Park, Wrangell-St. Elias. It was established in 1980 and has almost 10,000,000 acres. The smallest wilderness area is located off the coast of Florida. It is Pelican Island Wilderness Area, established in 1970 and managed by the U.S. Fish and Wildlife Service. It is only five acres and was the first National Wildlife Refuge established in the United States by President Theodore "Teddy" Roosevelt in 1903.

Who manages wilderness areas? They exist within: National Forests and Grasslands managed by the U.S. Forest Service; National Parks protected by the National Park Service; National Wildlife Refuges managed by the U.S. Fish and Wildlife Service; and on lands managed by the Bureau of Land Management. Does anyone know the similarities or differences between the four federal agencies that manage our wilderness areas? Two of the agencies are guided by a multiple use act and two have a single purpose. The Multiple Use-Sustained Yield Act (P.L. 86-517) established long-standing management policy for the forests for recreation, wildlife, fish, range forage, water and timber. The U.S. Forest Service and the Bureau of Land Management are governed by this act. The National Park Service has a mission . . . to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations. The U.S. Fish and Wildlife Service is dedicated to the management of ...wildlife refuges, areas for the protection and conservation of fish and wildlife that are threatened with extinction, wildlife ranges, game ranges, wildlife management areas, and waterfowl production areas. Even though each of these four federal agencies manages their lands differently, wilderness areas that lie within each of their boundaries must be managed in a similar manner. The Wilderness Act of 1964 states that wilderness . . . is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain. ...retaining its primeval character, without permanent improvements or human inhabitation, protected to preserve its natural conditions. The four federal agencies that manage wilderness areas are committed to accomplishing this directive by the people of the United States.

#### III. Teaching Procedure/Methodology

When one is traveling in a wilderness area, or for that matter anywhere, they should have a map. Maps can be planimetric or topographic and are used to inform us about the features of a geographic area. A map can also help us get us from one location to another. Highway maps used by motorists are planimetric. They do not show elevation. If you are driving on a road you usually do not have to concern yourself with hills and valleys. That is why we would use a topographic map when we are on a hike. A "topo" map shows us elevations and depressions on the earth's surface. These changes in the surface of the earth are shown by contour lines.

Another type of map is a thematic map. These maps have a very specialized function. They are not designed for navigation. They are not used to get us from one location to another. They are designed to visually provide information. They show us information about a specific topic or theme. The map we are going to view today is a thematic map that represents wilderness areas managed by four federal agencies, the Bureau of Land Management, the National Park Service, and the U.S. Fish and Wildlife Service, all within the Department of Interior. The fourth agency is in the Department of Agriculture. Can anyone tell me what agency that is? Correct, the U.S. Forest Service.

(Distribute NWPS maps.) As we look at the map of the National Wilderness Preservation System, we can see there are various colors associated with the wilderness areas. What do these colors represent? We can find the meaning of these colors by looking at the map legend. What is a legend? A legend is a story about an event. A legend on a map tells us a story about the map. It provides a brief description of what we are looking at on the map. Map legends tell us what the various symbols and colors represent. What else can we see on this map? State boundaries, rivers, large bodies of water, plains, and mountains. Where are most of the wilderness areas located? Why do you think they are found mostly in the western United States? When we settled this country from where did we start? Where is most of our nation's population located?

As we settled our country, moving inland from the east coast, we used most of the available land to build homesteads, farms, towns, and cities. By the time we reached the Mississippi River we realized that we had not set aside any 'open space' for use by all the people. It became apparent that we had better start setting land aside for the future. That is why our wilderness areas are found mostly in the western states on land owned by the federal government. The land in the east had been almost completely developed. The public lands in the west are special lands set aside for all of us to enjoy. Our country's wilderness areas are very special treasures that have been protected for the future.

How can we find out how many acres (43,560 square feet or I/640 of a square mile) each wilderness area has? We can use the Internet (http://www.wilderness.net/) and investigate each of the more than 630 locations. If we were to look at wilderness areas in metric units we would be using hectares instead of acres. To convert acres to hectares you need to multiply the number of acres by 0.405. If you know the hectares but want to know acres you can multiply the hectares by 2.471.

We know the largest and smallest wilderness area. Using the NWPS Map let's locate the Wrangell-St. Elias and Pelican Island Wilderness Areas. Now let's look at some wilderness areas across the United States.

#### IV. Check for Student Understanding

Ask students about the NWPS Map:

- Where are the largest areas (total acreage) of wilderness located?
- Where are the most (frequency) wilderness areas?
- Why do you think they are located in this region (western) of the U.S.?
- Where is most of the wilderness in our country? Where are the population centers of our country?
- What are the geographical features of the regions where most wilderness area are located?
- What wilderness areas are in our state? /Why are there no wilderness areas in our state.
- How large is the wilderness area in Black Canyon of the Gunnison National Park? How do you know this?

#### V. Guided Practice

I have selected the Absaroka-Beartooth Wilderness Area. It is located in Montana, has 920,343 acres, and is managed by the U.S. Forest Service. The other wilderness area I have selected is the Okefenokee Wilderness Area in Georgia. It has 353,981 acres and is managed by the U.S. Fish and Wildlife Service. Can you locate these two wilderness areas on the NWPS map?

(Distribute graph paper.) Using the graph paper we need to establish the number of acres each square will represent so that we can make a thematic map of each of the wilderness areas I have selected. How many squares are there on the graph paper? I can count each one of the squares or I can multiple the number of squares on one side by the number of squares on the other side to determine the area of this rectangle. There are 952 squares on the graph paper. How many acres will each of the squares on the graph paper have to represent so that the Absaroka-Beartooth Wilderness Area will fit on this sheet of graph paper? Yes, 1,000 acres. How many squares will it take to represent the Absaroka-Beartooth Wilderness Area? (a little over 920). How many for the Okefenokee Wilderness Area? (almost 354).

Let us estimate the size difference or the ratio in size of the two wilderness areas. What is the size difference of these two wilderness areas? Is the Absaroka-Beartooth Wilderness Area ten times as big as the Okefenokee? Five times? Twice as large? Yes! The Absaroka-Beartooth Wilderness Area is approximately two and one half times as large as the Okefenokee Wilderness Area. How can we mathematically prove this? Yes. We can divide the total acreage of the Absaroka-Beartooth Wilderness Area (920,343) by the total acreage of the Okefenokee (353,981) and get 2.59. If we round that up we will get 2.6. To confirm our calculation we can multiply 353,981 x 2.6. Our answer should be the total acreage of the Absaroka-Beartooth Wilderness Area. We get 920,351! Almost the exact answer we were looking for. So we can say that the Absaroka-Beartooth Wilderness Area is 2.6 times as big as the Okefenokee Wilderness Area.

Let us convert our acreage to hectares. A hectare is a metric measurement of surface area. It is equal to 10,00 square meters. In order to calculate the number of hectares, knowing the acreage, we multiple the number of acres by 0.405. The Absaroka-Beartooth Wilderness Area, 920,343 acres would be 372,739 hectares. The Okefenokee Wilderness Area, 353,981 acres, would be 14, 336 hectares. If we were to draw thematic maps of

the two wilderness areas using hectares instead of acres. Would our ratio or scale remain the same? Yes. The scale or ratio can be any unit of measurement and will always remain the same. Using acres or hectares the Absaroka-Beartooth Wilderness Area will always be 2.59 times larger than the Okefenokee Wilderness Area. What if we used square inches? The ratio or scale would still be the same. The Absaroka-Beartooth Wilderness Area would still be 2.59 times as large as the Okefenokee.

Using the graph paper, each square representing 1,000 acres, let's draw to scale the Absaroka-Beartooth Wilderness Area. It can be any shape you want it to. We are only trying to represent the size of the wilderness area. Now let's draw to scale the Okefenokee Wilderness Area inside the Absaroka-Beartooth Wilderness Area. You can place it anywhere inside of the Absaroka-Beartooth Wilderness Area that you want to. It can also be any shape. We are attempting to tell a story with a graph. We are showing people that one of these wilderness areas is 2.6 times as large as the other. Now let's place a legend on our map and a scale to describe what everything represents.

#### **VI. Independent Practice**

Now I want you to select two wilderness areas. One must be smaller than the Absaroka-Beartooth Wilderness Area and larger that the Okefenokee Wilderness Area and managed by the Bureau of Land Management. Then find one that is smaller than the Okefenokee Wilderness Area and managed by the National Park Service. Draw them to scale on your theme map. After you have drawn them on your map, convert the acres of each of the wilderness areas you have selected to hectares. Be prepared to tell the class about the wilderness area that you researched. You can use the Internet to get you data.

#### VII. Closure

(After the students have completed their investigation and reported to the class.) Wilderness areas exist in all but six states, and are found from the lowest elevations to the tops of our highest mountains. They are found in wetlands, swamps, deserts, forests, tundra, and mountain peaks. They exist on national forests, managed by the U.S. Forest Service; National Parks managed by the National Park Service; lands managed by the Bureau of Land Management; and, in National Wildlife Refuges managed by the U.S. Fish and Wildlife Service. All of us must do what we can to respect and protect wilderness areas in the United States. No matter how large or small a wilderness area, or what agency manages it, that wilderness area is a very special place. A wilderness area has human and ecological value that is vital to the well-being of the world.

#### VIII. Self-Evaluation

Indicate what you judge to have been the strengths of the lesson, what changes you made during the lesson and what changes you would make if you were to teach the unit again.

#### IX. References Cited

The National Wilderness Preservation System 1964-1999 map. The Wilderness Society, Arthur Carhart National Wilderness Training Center, also Leopold Wilderness Research Institute, and National Geographic Maps/Trails Illustrated, Dec. 1999

#### X. Related Internet Sites

http://www.nps.gov

http://www.blm.gov

http//:www.fws.gov

http://www.wilderness.net/leopold

http://www.lep.org

http://www.wildernesssociety.org

http://www.nps.gov/cgi-bin/intercept?http://www.sierraclub.org

#### 4. Education Curriculum – Black Canyon of the Gunnison National Park (www.oneplaneteducation.com)



What Is a Wilderness Area?

#### **Teacher Activity Page**

[Standards] [Related Hot Links] [Teacher Page] [Student Page] [PDF File]

#### Background:

A wilderness is a living storehouse for a great diversity of plant and animal life. It is also a living laboratory where scientists can observe the world in its natural state. This activity concentrates on wilderness concepts and gives students an overview of what designates an area to be a National Wilderness such as the Black Canyon.

#### Objectives:

In this activity students will:

- · Learn the definition of what makes an area a wilderness.
- · Learn about wilderness legislation.
- · Learn about wilderness management.
- · Learn about wilderness policies.
- · Discover the locations of designated wilderness areas in the United States.

#### Resources/Materials/Supplies

Internet access to: Web site: National Wilderness Preservation System http://www.wilderness.net/nwps/

All of the four parts of this series relate to this activity, but Part One has the most emphasis.

#### Directions:

#### Part One:

This activity primarily explores the web site: National Wilderness Preservation System (see above address.) Become familiar with this site prior to introducing it to the students.

- · Introduce the activity with engagement questions such as:
- · How many of you have been to a wilderness?
- · Where do you think the closest one is to your home?
- · What makes a wilderness unique and different from other areas?
- How do agencies such as the National park Service manage and protect wilderness areas?
- What are the pros and cons to having wilderness areas?

Demonstrate and tour through the web site: National Wilderness Preservation System.

In pairs or small groups assign this site into five teams:

- · What is a Wilderness
- · Wilderness Legislation
- · Wilderness Management
- Wilderness Policy
- · The Wilderness Information Network

#### 4. Education Curriculum – Black Canyon of the Gunnison National Park (www.oneplaneteducation.com)

and direct the student/teams to explore each link in these sections.

Have the teams report out their significant findings. You may want to create a report form for this or let the students write in their journals or logbook.

At the end of this activity make sure the class identifies the closest wilderness areas to their homes.

#### Part Two

As a whole class explore the features of one or two wilderness areas in close proximity to your home (as identified in Part One)

Using the information gained in Part One identify why this area qualifies as a wilderness are and what policies and management practices are in place to protect the site(s)

#### Management Tips and Hints:

This is a self-paced activity and your knowledge of the site in advance will make it easier to help students as they explore the web sites.



## WELCOME

#### WHAT IS THE BWCA WILDERNESS KIT?

This curriculum is a joint project of the Boundary Waters Wilderness Foundation and the United States Forest Service-Superior National Forest. The Kit is designed to teach about the uniqueness and complexities of wilderness, specifically the Boundary Waters Canoe Area Wilderness (BWCAW). Located along the Minnesota-Canadian border, this pristine land has been set aside as a national treasure. It is rich in natural, historical, and cultural value, and is one of the most heavily used wilderness areas in the country. In order for the BWCAW to continue to exist in its naturally balanced state, modern visitors need to be aware of this delicate and unique area, and understand how people played and continue to play a role in managing and protecting the wilderness.

#### WHO CAN USE THE BWCA WILDERNESS KIT?

Teachers, educators, facilitators, youth group leaders, church group leaders, and others are the intended users. You do not need to be a wilderness "expert" to teach these units effectively. The BWCA Wilderness Kit is created for both formal and non-formal educators. The units and activities are aimed at middle school grade levels (5-8) for approximately 5-30 participants. However, each lesson is flexible enough to tailor the content to a younger or older audience.

#### HOW DO I USE THE BWCA WILDERNESS KIT?

The BWCA Wilderness Kit contains five units. Each can be used independently, to focus on a particular topic, or used sequentially. The time frame for one unit is approximately 50 minutes but can vary depending on the individual class or group. Time guidelines are given in each unit and exist merely as suggestions. Feel free to extend or shorten an activity as it is appropriate with a particular group. All materials, props and game pieces are included in the Kit. Some activities require photocopying prior to teaching the unit. The BWCA Wilderness Kit may be used in a classroom or gathering space. Rooms with moveable desks and chairs or large open spaces are preferred.

We are excited that you have chosen this curriculum. It is an engaging and educational compilation of units focusing on the Boundary Waters Canoe Area Wilderness (BWCAW) in northern Minnesota.

We hope that you enjoy using this curriculum. As with any educational material, this Kit is dynamic. We encourage you and your group to send us comments and suggestions explaining how this Kit was effective or how it could be improved.

Thank you for using the BWCA Wilderness Kit. By increasing awareness and training people to use the wilderness responsibly, we hope to ensure the continued presence of the BWCAW and its availability for decades to come.



## WELCOME

#### FOR MORE INFORMATION:

The BWCA Wilderness Kit was jointly produced by the Boundary Waters Wilderness Foundation and the United States Forest Service-Superior National Forest. Both are available to answer questions regarding content, instruction, and materials of the kit.

#### Boundary Waters Wilderness Foundation

401 North Third Street Suite 290 Minneapolis, MN 55401 (612) 332-9630

Fax: (612) 332-9624

E-mail: info@friends-bwca.org www.friends-bwca.org

#### Superior National Forest

8901 Grand Avenue Place Duluth, MN 55808-1102

(218) 626-4300 Fax: (218) 626-4354

E-mail: r9\_superior\_NF@fs.fed.us www.fs.fed.us/r9/superior



The BWCA Wilderness Kit is carefully designed to include a variety of teaching methods to increase a participant's motivation as well as to affect the learning atmosphere. We recognize that all people learn differently. Consequently we have tried to create a curriculum that presents materials in multiple ways. Be prepared for a high level of activity, movement and discussion in each unit.

#### WHEN DO I USE THE BWCA WILDERNESS KIT?

Wilderness is an interdisciplinary topic; the Kit is not limited to science or environmental education teachers. Use the Kit to complement a unit on forests, Minnesota history, ecology, nature writing, federal legislation, or before you lead a trip to the BWCAW. Look through the "Skills," "Concepts," and "Objectives" sections of each unit to determine when each particular unit would best fit into your class or group schedule.

#### WHO FUNDED AND CREATED THE BWCA WILDERNESS KIT?

The Kit was developed in 1994 with grants from the Boundary Waters Wilderness Foundation, Superior National Forest, Dell Trust Fund, and the Boundary Waters Education Consortium. Additional funding was provided through grants from the WM Foundation and REI.

Original authors include: Julie Madsen Bates; Tim Bates; Ken Gilbertson; Katharine Johnson; Lisa Mostrom; and Sally Rauschenfels. Original contributors include: Carrie Anderson; Ellen Hawkins; Rachel Hefte; Peter Mostrom; and Maria Thompson.

The Kit's curriculum was revised in 2002 by Julie Flotten and its appearance redesigned by Don Farleo Advertising and Design Company. Contributors include: Christina Boston; Mary Hanney; Ellen Hawkins; Melissa Lindsay; Kris Reichenbach; Sarah Strommen; and Sean Wherley.

Thanks is extended to Mark Stensaas for permission to use illustrations from Canoe Country Wildlife and Canoe Country Flora.



# OVERVIEW OF EACH UNIT

#### UNIT ONE: WHAT IS WILDERNESS?

This unit focuses on what makes a place a "wilderness." Participants discuss or vote on what particular objects, sounds, and images belong in a wilderness. They are introduced to the National Wilderness Preservation System and the Wilderness Act of 1964. Participants then determine how the Boundary Waters Canoe Area Wilderness fits into the criteria of a federally-designated wilderness area.

#### UNIT TWO: HOW DIVERSE IS BIODIVERSE?

This unit explores the concept of ecosystems. Using teams, participants decide what species survive and thrive in the five ecosystems of the BWCAW. Participants combine their ideas and analyze patterns they notice. The final discussion relates these connections to the importance of diversity within an ecosystem.

#### UNIT THREE: THE CHANGING FOREST

This unit concentrates on how forests in the BWCAW change over time. Through role-playing and games, participants learn the idea of forest succession and the importance of different disturbances impacting a forest.

#### UNIT FOUR: PEOPLE OF THE BOUNDARY WATERS

Participants form teams to become "experts" on a particular user group of the Boundary Waters: the Ojibwe; the Voyageur; the Logger; and the Modern Visitor. Teams learn about their specific character's use of, and impact on, the Boundary Waters. Participants then "test" their knowledge in the Paddler's Game!

#### UNIT FIVE: LEAVE NO TRACE

Participants learn how their actions and choices can impact the wilderness as they take an imaginary trip to the BWCAW. After discussing high and low impact choices, participants apply and categorize their decisions in relation to the seven Leave No Trace principles.











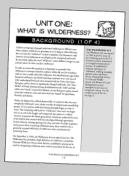
THE BWCA WILDERNESS KIT

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## ANATOMY OF A UNIT







#### **CONCEPTS AND KEY IDEAS:**

The main concepts and key ideas presented in each unit.

#### **GOALS:**

The knowledge participants will attain upon completion of the unit.

#### SKILLS

A list of skills the participants use to complete the unit.

#### MATERIALS NEEDED:

A list of the materials the instructor will need in order to teach the unit and each activity. Some materials may need to be copied prior to teaching. You may make copies from the master in the manual or by using the electronic files on the CD provided.

#### **BACKGROUND:**

Information provided for the instructor in order to become familiar with the content before teaching the unit.

#### PREPARATION AND INTRODUCTION:

Outlines the materials and steps necessary to prepare the classroom or area for teaching the unit. Also, outlines discussion questions to use to introduce participants to the unit topic.

#### SIDEBARS:

Facts for the instructor to share during the unit, tips for teaching the unit, helpful definitions, further background information.

#### **ACTIVITIES:**

Explanations and instructions for conducting games and discussions. Each activity correlates to the unit concepts and key ideas. Each activity includes specific activity objectives, instructions and a suggested time frame. These time suggestions represent the optimum amount of time to make a particular activity most effective.



## ANATOMY OF A UNIT

#### **OBJECTIVES:**

The tasks participants will accomplish by the end of the activity.

#### **INSTRUCTIONS:**

Rules and directions for completing the activity.

#### UNIT CLOSING:

A review of concepts introduced in unit activities. Concepts are then applied to answer related questions.

#### WILDERNESS PASSPORT:

An activity or activities that assess what the participants have learned during the unit. You can copy the Passport for each participant or simply write the questions on a chalkboard or piece of paper. A stamp for each unit is included in the materials. Stamp each participant's passport when he or she has completed the question or activity. The time it takes to complete the Passport is NOT included in the 50 minutes allocated for the unit. It is important to take the time to complete the Passport either as homework or as a follow up to the unit. These questions and/or activities reinforce the concepts taught during the unit. The Passport is designed to be assembled with the cover sheet (found in appendix) upon completion of all units.

#### **EXTENSIONS:**

Activities or projects to extend the topics covered in the unit. It is strongly recommended that classes or groups complete one or more of these extensions.

Each extensions list begins with a reference to the Arthur Carhart National Wilderness Training Center's "Wilderness and Land Ethic Curriculum." This is a national wilderness curriculum developed jointly by the USDA Forest Service, Bureau of Land Management, National Park Service and U.S. Fish and Wildlife Service, the four agencies responsible for the management of the National Wilderness Preservation System. The Wilderness Box and Land Ethic Curriculum is an excellent



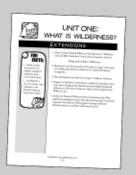


THE BWCA WILDERNESS KIT

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# ANATOMY OF A UNIT







source of additional background information and lessons for people who use the BWCA Wilderness Kit.

#### MINNESOTA GRADUATION STANDARDS:

Indicates which specific Minnesota Graduation Standards correlate to each unit as they apply to Middle School Grades 5-8.

#### ADDITIONAL INFORMATION & RESOURCES:

A list of places to go for more information on the topic covered in each lesson. We apologize if some of the website links are missing or broken; they were updated in November 2002.

#### FUN FACTS:

Tidbits of information that are fun to share with participants. These will appear throughout the unit.

# Sample Educational and Interpretive Programs and Products

# THE BWCA WILDERNESS KIT

Lesson Plan and Materials





# OVERVIEW

#### GRADES: 5-8

**AGES:** 11-14

TIME: 50 minutes

#### MATERIALS NEEDED:

- 1. Vote With Your Feet items and images
- 2. Instructor Reference Sheet: Vote With Your Feet Object, Image and Sound Identification Sheet
- Tape/CD player and Vote With Your Feet Sounds tape/CD
- 4. Belongs in Wilderness, Does Not Belong in Wilderness signs
- 5. National Wilderness Preservation System Map
- Instructor Reference Sheet: Wilderness Act Primer Cards
- 7. Wilderness Act Primer Cards (9)
- 8. Map of BWCAW
- Instructor Reference Sheet: Wilderness Act of 1964 Excerpts
- 10. Instructor Reference Sheet: What is the BWCAW?
- 11. Unit One Wilderness
  Passport (master in manual or on CD, make copies as needed)
- 12. Unit One Wilderness Passport stamp and ink pad

#### CONCEPTS AND KEY IDEAS:

- The idea of wilderness varies from individual to individual, across cultures, and over time, and may incorporate physical, spiritual, recreational, and economic elements.
- 2. The Wilderness Act, which established the National Wilderness Preservation System, provides a common definition of wilderness that serves to protect and to conserve wilderness areas and their scientific, watershed, life support systems, historic and cultural, spiritual, aesthetic, recreation, refuge, and educational values.

#### GOALS:

- Participants will be able to give a personal definition of wilderness and understand that the idea of wilderness varies from individual to individual.
- 2. Participants will be able to describe in their own words the purpose and main components of the Wilderness Act of 1964.
- Participants will be able to identify the Boundary Waters Canoe Area Wilderness as part of the National Wilderness Preservation System and describe some of its unique characteristics.

#### SKILLS:

- 1. Brainstorming in a large group
- 2. Identifying pictures, objects and sounds
- 3. Decision-making
- 4. Defending an opinion
- 5. Reading and listening comprehension
- 6. Drawing conclusions
- 7. Communicating



# BACKGROUND (1 OF 4)

Cultures and groups of people understand wilderness in different ways. Some cultures, which live in proximity to or in balance with wilderness, have no word for "wilderness" in their vocabulary. The Puritans in early America viewed wilderness as an evil place to be conquered and tamed. In our society today, the word "wilderness" evokes different images in each person's mind. So what exactly is wilderness?

In order to answer this question it is important to remember that wilderness is a concept created by cultures which did not live in balance with, or were at odds with with, wilderness. Five hundred years ago, before European settlement, the North American continent was a vast tract of wild, undeveloped land and water occupied only by Native Americans. European settlers, however, significantly changed wild lands. The "New World" of North America became divided between the "wild" and that which was "tamed" or part of civilization. As the European settlers moved across the continent, more and more land was "tamed" for agriculture, livestock, and homes.

Today, the balance has shifted dramatically. A continent that was once completely wild land is now almost entirely developed and controlled by people. As less and less wild land remained people began to value it more. The remaining wild lands or "wilderness" areas were no longer seen as an evil to be fought and conquered, but rather as a valued resource to preserve for future generations. Americans realized that most of the land in this country had been developed through agriculture, homes, forestry, mining, grazing and other activities. In order to protect and preserve these remaining wilderness areas, there needed to be a generally accepted definition of wilderness and a mechanism for protecting them.

On September 3, 1964, the Wilderness Act was signed into law. The Wilderness Act provided a legal definition of wilderness, created the National Wilderness Preservation System, established a process to be used for designating wilderness areas, and set provisions for the use of

#### THE WILDERNESS ACT

The Wilderness Act was enacted in 1964 to protect some of the remaining areas in the U.S. that had not been restructured or changed dramatically by humans. The Act established a common definition of "wilderness," enabling managing agencies such as the Forest Service, National Park Service, U.S. Fish and Wildlife Service, and Bureau of Land Management to base management practices on recognized criteria. For the complete text of the act, see the appendix.

THE BWCA WILDERNESS KIT

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### BACKGROUND (2 OF 4)



#### THE LANGUAGE OF WILDERNESS

Looking at the root of the word wilderness, it is easy to see how different cultures perceive wilderness. "Wilderness" is based in the Germanic/Norse languages and comes from the root "will" and "wild" meaning self-willed, uncontrollable, disordered, and confused. In Old Swedish "wild" means "boiling water." The Old English definition of "wildeor" is a place of wild beasts. Wilderness in Spanish is "falta da cultura," literally "lack of civilization," and in Italian, wilderness is "scene di disordine o confusione." fairly self-explanatory.

wilderness areas. The intent of the Wilderness Act was to establish wilderness areas "for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness..." Legal wilderness, "in contrast with those areas where man and his own works dominate the landscape," is "recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain."

In order to comprehend the concept of wilderness, it is important to understand the many values of wilderness. While most people are familiar with the common recreational values of wilderness there are also other non-recreational values of wilderness.

One value of wilderness is the life support value of wilderness. Wilderness protects watersheds and plays an important role in oxygen production, carbon dioxide absorption, soil building, biomass decomposition, insect regulation, and pollution scrubbing. Wilderness can be used as a benchmark to show what an ecosystem undisturbed by humans looks like. This will help us learn to better intertwine ourselves within the biological systems in which we exist. These areas can also serve as gene banks and a place for natural evolutionary processes to continue.

Related to this life support value is the scientific value held in wilderness. Wilderness is a natural lab in which we can study natural processes. Society can benefit from this scientific research as it enlarges our understanding of the world and our roles in it. If we were to destroy all wilderness it would be like burning an unread book. Research may lead to yet undiscovered knowledge and uses of resources found in wilderness.

Wilderness also holds educational value and training value for schools and universities. It is an important classroom for learning outdoor skills such as orienteering, survival, mountaineering and stock packing. It can be used by outdoor education programs to teach about natural processes. It is also the source of material for many magazine articles and television



## BACKGROUND (3 OF 4)

shows about plants and animals. Many people enjoy wilderness vicariously through these kinds of media.

For many, wilderness is much more than just a place to soak in the scenery. Its aesthetic value is appreciated through intimate contact with the environment and can be sublime, awesome and majestic. It is a place where people can experience sights, sounds and feelings they are unable to experience in other less natural settings. People, some of whom may never actually visit a wilderness area, also enjoy the aesthetic value of wilderness vicariously through items such as posters, calendars, and books.

For some, wilderness also holds philosophical and religious value and is a sacred place. To them wilderness is a place with natural cathedrals where people can celebrate the creative forces behind life. It is a place where we can better understand unity and continuity. Wilderness is spiritually sustaining and has spiritual cleansing powers for some.

A value of wilderness that is more difficult to understand is its intrinsic value. This value hypothesizes that non-human organisms have a place on earth and that even inanimate objects have the right to exist. This value confers that all value does not originate with humans and that plants, animals, inanimate objects and the ecosystems that they inhabit, have rights of their own whether or not humans assign that value.

The National Wilderness Preservation System continues to grow every year from the original 9.1 million acres established by the 1964 Wilderness Act. Since 1964, Congress has passed scores of laws adding hundreds of areas and over 100 million acres to the National Wilderness Preservation System. In 2002, there were 644 individual wilderness areas totaling 105,778,352 acres. Alaska contains 58,182,216 acres, which is about 56 percent of all wilderness in the United States. About 4.4 percent of the continental United States is protected as federal Wilderness. Four federal agencies manage designated Wilderness in the United States: the National Park Service, the Forest Service, the Bureau of Land

## FUN FACTS:

- U.S. Senator Hubert Humphrey of Minnesota and nine other Senators introduced the first wilderness bill in 1956.
- The Wilderness Act was signed on September 3, 1964 by President Lyndon Johnson.
- It took 8 years, 18 hearings and 66 versions of the wilderness bill before Congress passed the final version.

THE BWCA WILDERNESS KIT

1-5



# BACKGROUND (4 OF 4)

Management and the Fish and Wildlife Service. Wilderness is one layer of protection placed on top of the original federal land designation.

So, while people have an individual perception and understanding of wilderness, the Wilderness Act provided a legal definition for federally-designated wilderness. Other non-federal lands, such as those owned by states or land trust organizations, may also be called wilderness but may not have the same features, criteria, and resource values as used in defining federal wilderness areas. When discussing wilderness it is important to differentiate how it is defined by individuals, non-federal land managers, and federal legislation.



## PREPARATION & INTRODUCTION

#### INTRODUCTION: (4 minutes)

- Ask the following questions to assess the participants' knowledge and get them ready to learn.
  - Have you ever been in a wilderness area before? If so describe what made it a wilderness.
  - Have you heard of, or been to, the Boundary Waters Canoe Area Wilderness?
- Explain that the unit will explore the idea of wilderness and wilderness areas around the country (including one in our "backyard") and why wilderness areas exist.

#### PREPARING FOR UNIT ONE:

- Read through the unit and familiarize yourself with all of the materials before starting the activities.
- Make sure you have a chalkboard or large piece of paper to create the What is Wild? list.
- Set up the room so participants have an area to move around during Vote With Your Feet.
   You will need approximately 15-20 square feet of empty space depending on the number of participants.
- Take the materials out of the BWCA Wilderness Kit marked "Unit One: What is Wilderness?"
- Plug in the tape cassette/CD player, insert the Vote With Your Feet Sounds tape/CD and have the bag of Vote With Your Feet objects and images ready.



# ACTIVITY ONE: WHAT IS WILD?

TIME: 3 minutes

#### MATERIALS NEEDED:

Chalkboard and chalk OR large sheets of paper and markers to create the What is Wild? list.

#### OBJECTIVE:

 Participants will classify those objects, images, and sounds that represent wilderness.

#### INSTRUCTIONS:

Use a chalkboard or large sheet of paper that all participants can see.

- Brainstorm with participants a list of words that describe wilderness.
- 2. Make another list of things that should be in wilderness.

## INSTRUCTOR'S NOTE:

Expect that participants' ideas and opinions will differ. There is not necessarily a right or wrong answer in this activity. Encourage discussion. The point of the activity is to demonstrate that not everyone agrees on what should be in the wilderness.



## ACTIVITY TWO: VOTE WITH YOUR FEET

#### **OBJECTIVES:**

- Participants will classify those objects, images, and sounds that represent wilderness.
- 2. Participants will observe how the word "wilderness" evokes different meanings.

#### **INSTRUCTIONS:**

- 1. Ask all of the participants to stand up.
- Establish two ends of a continuum in the room about 15 feet apart (depending on size of room, and size of group). Label one end of the room, Belongs in Wilderness and the other Does Not Belong in Wilderness with the signs provided.
- 3. Get the bag of Vote With Your Feet items.
- 4. Ask 5-7 volunteers to pull out Vote With Your Feet objects one at a time. When the group sees the object, each individual must choose where to stand along the continuum depending upon what he or she thinks. A participant is allowed to stand anywhere, including the middle or either end.
- Discuss some of the participants' "votes;" allow time for some group discussion. Get participants to elaborate on their points and encourage others to respond.
  - Why did they choose that vote?
  - Who disagrees/agrees and why?
  - What would they change about that item to ensure that it does or does not belong?

# TIME: 15 minutes MATERIALS NEEDED:

- Belongs in Wilderness and Does Not Belong in Wilderness signs
- Vote With Your Feet items and images
- 3. Tape/CD Player
- 4. Vote With Your Feet Sounds tape/CD
- Instructor Reference Sheet: Vote with Your Feet Object, Image and Sound Identification Sheet



## ACTIVITY TWO: VOTE WITH YOUR FEET



9,676,994 acres
3. Smallest wilderness area in U.S. =
Florida's Pelican Island
- 5 acres

- Next, hold up some of the Vote With Your Feet Images and/or play some of the Vote With Your Feet Sounds from the tape/CD and repeat voting.
- 7. Conclude the activity by asking participants:
  - · What patterns did they notice as they were voting?
  - What would they add to, or subtract from, their initial words from the What is Wild? list made earlier?
  - If they had to decide what areas to designate as wilderness, how would they choose these areas? What factors would affect their decision?



## INSTRUCTOR REFERENCE SHEET (1 OF 2)

#### VOTE WITH YOUR FEET OBJECT, IMAGE AND SOUND IDENTIFICATION SHEET

#### Objects

(Some of the objects are replicas of the real thing; unless labeled, all other objects are real. The scat has been varnished and is safe to touch; it is not a health hazard.)

- 1. Beaver Tail (replica)
- 2. American Toad (replica)
- 3. White Tailed Deer Antler
- 4. Moose Scat
- 5. Morel Mushroom (replica)
- 6. Bracket Fungus
- 7. Jack Pine Cone
- 8. Wolf Track (casting)
- 9. Black Bear Track (casting)
- 10. White Tailed Deer Fur
- 11. Black Bear Fur
- 12. Bug Spray Bottle
- 13. Glass Bottle
- 14. Fishing Line
- 15. Aluminum Foil Ball
- Walkman and Audio Tape
- 17. Bottle Caps
- 18. Plastic Bags

#### Images

- 1. Moose and Calf
- 2. Scenic View of Lake
- 3. Eagle
- 4. Loon
- 5. Bear
- 6. Wolf
- 7. Deer
- 8. Owl
- 9. Wildflower (Iris)
- 10. People in Canoe
- 11. Fire Hydrant
- 12. Fast Food 13. Mailbox
- . . . . . . .
- 14. Machinery
- 15. Lock and Key
- 16. Snowmobile
- 17. Flower Garden
- 18. Trash Can
- 19. Boom Box
- 20. Mountain Bike
- 21. Snowshoes and Skis



## INSTRUCTOR REFERENCE SHEET (2 OF 2)

#### VOTE WITH YOUR FEET OBJECT, IMAGE AND SOUND IDENTIFICATION SHEET

#### Sounds

Push PAUSE on the tape/CD player after each sound to allow the group time to identify it.

- 1. Water Lapping at Shore
- 2. Woodpecker
- 3. Loon Call
- 4. Cow
- 5. Chain Saw
- 6. Mosquito
- 7. Telephone
- 8. Traffic
- 9. Grouse Drumming
- 10. Alarm Clock
- 11. People at a Party
- 12. Wind in the Trees
- 13. Lawnmower
- 14. Tent Zipper "Zipping"
- 15. Toilet Flushing
- 16. Beaver Slapping Water with Tail
- 17. Airplane
- 18. Cat
- 19. Wolf Howl



### ACTIVITY THREE: WILDERNESS ACT PRIMER

#### OBJECTIVE:

1. Participants will examine key components of the Wilderness Act.

#### INSTRUCTIONS:

- Pull out the National Wilderness Preservation System Map. Explain that after many years of debate about what should be in the wilderness, the Wilderness Act of 1964 was created to provide a national, legal definition of wilderness.
- 2. Briefly describe the purpose of the Wilderness Act.
- Hand out one Wilderness Act Primer card to each of nine participants.
   Each card contains a key passage from the 1964 legislation.
- 4. Instruct the participant holding "Card 1" to read aloud his or her section from the Wilderness Act. After reading the section, have the participant ask the group to describe what it means. Then have the participant read aloud the slogan, appearing in CAPITAL letters, and have the group repeat the slogan. Continue these steps with each of the next eight primer cards. Finish by having the participants read aloud their sections consecutively, without the slogans.

#### TIME: 15 minutes

#### MATERIALS NEEDED:

- National Wilderness
   Preservation System Map
- 2. Wilderness Act Primer Cards
- Instructor Reference Sheet: Wilderness Act of 1964 Excerpts
- Instructor Reference Sheet: Wilderness Act Primer Cards



### INSTRUCTOR REFERENCE SHEET

#### WILDERNESS ACT OF 1964 EXCERPTS

The Wilderness Act (16 U.S.C. 1131-1136) Sept. 3, 1964

#### Sec. 2.(a)

In order to assure that an increasing population, accompanied by expanding settlement and growing mechanization, does not occupy and modify all areas within the United States and its possessions, leaving no lands designated for preservation and protection in their natural condition, it is hereby declared to be the policy of the Congress to secure for the American people of present and future generations the benefits of an enduring resource of wilderness. For this purpose there is hereby established a National Wilderness Preservation System to be composed of federally owned areas designated by Congress as "wilderness areas," and these shall be administered for the use and enjoyment of the American people in such a manner as will leave them unimpaired for future use and enjoyment as wilderness, and so as to provide for the protection of these areas, the preservation of their wilderness character, and for the gathering and dissemination of information regarding their use and enjoyment as wilderness; and no Federal lands shall be designated as "wilderness areas" except as provided for in this Act or by a subsequent Act.

#### Sec. 2.(c) DEFINITION OF WILDERNESS

A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this Act an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand ares of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.



### INSTRUCTOR REFERENCE SHEET

#### WILDERNESS ACT PRIMER CARDS

#### CARD 1:

"It is hereby declared to be the policy of the Congress to secure for the American people of present and future generations the benefits of an enduring resource of wilderness."

SAVE SOME FOR US...SAVE SOME FOR US!!

#### CARD 2:

"A wilderness is hereby recognized as an area where the earth and its community of life are untrammeled..."

PLANTS AND ANIMALS COME AND GO AND GROW AS THEY PLEASE.

#### CARD 3:

"...where humans are visitors and do not remain..."

THANKS FOR VISITING. DON'T STAY TOO LONG!

#### CARD 4:

"...an area of undeveloped Federal land retaining its primeval character and influence..."

IT LOOKS LIKE NO HUMAN HAS BEEN HERE FOR YEARS!

#### CARD 5:

"...without permanent improvements or human habitation..."

NO CONSTRUCTION, NO DESTRUCTION

#### CARD 6:

"...which is protected and managed so as to preserve its natural condition which generally appears to have been affected primarily by the forces of nature..."

WHAT CHANGES THIS PLACE? WIND, WATER, FIRE AND TIME!

#### CARD 7:

"...has outstanding opportunities for solitude or a primitive and unconfined type of recreation..."

WE COULD WALK OR PADDLE FOR DAYS AND NOT SEE A SOUL.

#### CARD 8:

"...has at least 5,000 acres of land or is of sufficient size to make practicable its preservation and use in an unimpaired condition..."

5,000 ACRES MAKES A WILDERNESS TAKER.

#### CARD 9:

"...may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value..."

HISTORY, GEOLOGY, AND ECOLOGY OH MY!

(taken from the Wilderness Act, 1964 P16 U.S.C. 1131-1136, Sept. 3, 1964)



# ACTIVITY FOUR: WILDERNESS IN OUR BACKYARD

#### TIME: 8 minutes

#### **MATERIALS NEEDED:**

- 1. Map of BWCAW
- 2. Instructor Reference Sheet: Wilderness Act of 1964 Excerpts
- 3. Instructor Reference Sheet: What is the Boundary Waters Canoe Area Wilderness?
- 4. Wilderness Act Primer Cards (9)

#### **OBJECTIVES:**

- 1. Participants will locate the BWCAW on a map.
- 2. Participants will understand the unique characteristics of the BWCAW.

#### **INSTRUCTIONS:**

- Explain to participants that Minnesota is fortunate to have a wilderness area right in "our backyard."
- 2. Spread out the Boundary Waters Canoe Area Wilderness map.
- 3. Have participants gather around the map or hang it on a wall.
- 4. Take time for stories of those who have traveled to certain lakes or rivers.
- Share information from the What is the Boundary Waters Canoe Area Wilderness? sheet.
- 6. Ask participants to compare the list of BWCAW characteristics with their original What is Wild? list and the principles from the Wilderness Act. Review the Wilderness Act Primer cards, or spread them out so all the participants can gather around if needed.



### INSTRUCTOR REFERENCE SHEET (1 0F 4)

#### WHAT IS THE BOUNDARY WATERS CANOE AREA WILDERNESS?

Great glaciers carved the physical features of what is today known as the Boundary Waters Canoe Area Wilderness (BWCAW) by scraping and gouging rock. The glaciers left behind rugged cliffs and crags, canyons, gentle hills, towering rock formations, rocky shores, sandy beaches and several thousand lakes and streams, interspersed with islands and surrounded by forest.

The BWCAW is a unique natural area located in the northern third of the Superior National Forest in northeastern Minnesota. Approximately 1.3 million acres in size, the BWCAW extends nearly 150 miles along the International Boundary adjacent to Canada's Quetico Provincial Park and is bordered on the west by Voyageurs National Park. The BWCAW contains over 1,200 miles of canoe routes, 16 hiking trails and approximately 2,000 designated campsites and offers freedom to those who wish to experience solitude, challenge and personal integration with nature. Because this area was set aside in 1926 to preserve its primitive character and made a part of the National Wilderness Preservation System in 1964, the BWCAW allows visitors to canoe, portage and camp in the spirit of the French Voyageurs of 200 years ago.

Due to concerns about increased development that could have changed the natural character of the area that is now the BWCAW, early conservationists, both within and outside of the government, responded with efforts to protect the region. Their efforts led tothe withdrawal by the General Land Office of 500,000 acres from potential settlement. In 1909, President Theodore Roosevelt used these early land withdrawals to create Superior National Forest. Layers of additional protections for the Superior National Forest and the BWCAW have been added ever since, including the first administrative wilderness designation in 1926; inclusion of the BWCAW as an original wilderness under the 1964 Wilderness Act; and further protection of the region with the 1978 Boundary Waters Canoe Area Wilderness Act. The purpose of the Boundary Waters Canoe Area Wilderness Act of 1978 (Public Law 95-495) was to protect, enhance, and preserve the natural values of the lakes, waterways, and associated forests of the area. The act also intended to create orderly public use of the wilderness while protecting the area's aesthetic, cultural, scientific, recreational, and educational values to the nation. The act was debated in Congress for three years. The Congressional deadlock was finally broken when a representative for northeastern Minnesota residents and a representative from environmental groups met in a marathon negotiating session and reached a compromise agreement. The implementation of the BWCA Wilderness Act has resolved some of the issues concerning the management of the BWCAW. The act changed the BWCAW from an area of timber products and multiple forms of recreation to an area producing primarily a wilderness experience. It enhanced the recreational opportunities for those activities most supportive of the wilderness experience. The BWCAW is visited by more than 200,000 people annually, making it the most



### INSTRUCTOR REFERENCE SHEET (2 OF 4)

heavily used wilderness area in the country and complicating the Forest Service's job of balancing recreational use and wilderness values. The BWCAW is and has been popular throughout time because of its unique characteristics:

- One of the most unique features of the BWCAW is the great abundance and arrangement of lakes and streams. Approximately 1,175 lakes varying in size from 10 acres to 10,000 acres and several hundred miles of streams comprise about 190,000 acres (20 percent) of the BWCAW surface area. The opportunity for long-distance travel by watercraft through a series of interconnecting lakes, waterways, and portages in a scenic forest environment was a primary force behind wilderness designation. This type of experience is rare within the continental United States. The BWCAW is the only large lake land wilderness in the National Wilderness Preservation System. Canoeists can explore over 1,200 miles of routes, including some that trace those used by Native Americans and fur trading Voyageurs.
- The BWCAW is the largest and only federal wilderness of substantial size east of the Rocky Mountains and north of the Everglades.
- The BWCAW is one of four key protected areas in the international Quetico-Superior Ecosystem that
  includes Voyageurs National Park, Ontario's Quetico Provincial Park, and Ontario's LaVerendrye Provincial
  Park. This ecosystem stretches over 2,500,000 acres, creating an international wilderness of immense biological,
  recreational, and intrinsic value to both the United States and Canada. The combined protected area of the
  BWCAW, Voyageurs and Quetico is 3,859 square miles an area larger than Yellowstone National Park.
- Geologically, the BWCAW occupies the lower portion of the Canadian Shield. It is located on the remains
  of the ancient Laurentian Mountains, some of the oldest rock in North America. The Laurentian Divide
  separates two major drainage basins in the BWCAW: the Hudson Bay and the Great Lakes. About 90 percent
  of the BWCAW lies within the Hudson Bay basin and the remaining 10 percent flows into the Great Lakes.
  The BWCAW contains the highest point in Minnesota: Eagle Mountain (2,301 feet).
- The BWCAW is characterized as unique, pristine, endangered, rugged, primitive, beautiful, and fragile. It is a place to explore, reflect, challenge oneself, and refresh the human spirit. Visitor studies indicate that the top six motives for visiting the BWCAW include nature appreciation, personal development, escape/solitude, companionship, adventure, and fishing. Canoeing, hiking, skiing, dogsledding, fishing, hunting and camping throughout the seasons are a few of the recreational activities the wilderness supports. This land has inspired countless artists, photographers, poets, and writers.



## INSTRUCTOR REFERENCE SHEET (3 OF 4)

- The BWCAW is the most heavily used wilderness in the country with approximately 200,000 annual visitors staying for 1.5 million "recreation visitor days." The BWCAW represents less than one percent of the acreage of the National Wilderness Preservation System (NWPS), but receives 10 percent of the use in the entire NWPS. Approximately 65 percent of BWCAW visitors live in Minnesota.
- The BWCAW has a rich human history beginning with sites from the Paleo-Indian culture of 10,000-12,000 years ago. There are numerous cultural resource sites in the BWCAW resulting from the Woodland period (500 B.C. 1650 A.D.) and historic Native American settlements and activities. These include camping sites, villages, wild ricing sites, burial mounds, pictographs, and sites of spiritual and traditional importance. The BWCAW also contains evidence of a number of historic European and early American activities ranging from the fur trade up to and including early logging and settlement of the area.
- The BWCAW is a Class I air quality area, as defined by the federal Clean Air Act. It is the only wilderness in the country that has an airspace reservation, which requires airplanes and helicopters to fly at a minimum of 4,000 feet above the area. The airspace reservation was created by an Executive Order in 1949 by President Harry Truman. The White House is the only other airspace reservation in the country.
- The BWCAW provides a unique place for types of research and education that cannot be accomplished in more
  developed places. The types of research include plant and animal ecology, animal behavior, paleoecology,
  geology, fire history, and limnology. The BWCAW is also an important place of education for students
  learning natural history, science, and primitive skills.
- The BWCAW contains the largest contiguous area of virgin forest remaining in the eastern United States. The BWCAW lies at the transition between the southern most edge of the boreal forest and the Great Lakes Forest, providing aspen, birch, spruce, fir and pine forest habitat. In these woodlands, humans and wildlife enjoy a variety of woodland wildflowers and berries, including the Showy Lady Slipper, blueberries, raspberries, and wild cherries.
- Superior National Forest, including the BWCAW, was named by the American Bird Conservancy in 2001 as one of 100 Globally Important Bird Areas. The BWCAW provides critical habitat to many species of neo-tropical migrating birds birds which breed in North America and migrate to Central and South America in the winter. The year-round resident bird population includes raven, pileated woodpecker, gray jay, chickadee, ruffed and spruce grouse, and the great horned owl. Summer residents include several species of warblers, white-throated sparrow, red-eyed vireo, cedar waxwing, bald eagle, common loon, merganser, black duck, northern goshawk, broad-winged hawk, osprey and peregrine falcons, an endangered species.



### INSTRUCTOR REFERENCE SHEET (4 OF 4)

- The BWCAW provides important habitat to many wildlife species at all levels of the food chain including gray wolf, red fox, lynx, fisher, pine martin, mink, otter, weasel, black bear, moose, beaver, red-backed salamander, southern bog lemming, northern leopard frogs, bats, white tailed deer, black bear, beaver, porcupine, snowshoe hare, red squirrel, and chipmunk. The fish population includes lake trout, walleye, northern pike, smallmouth bass, largemouth bass, perch, crappie, whitefish, sucker, sturgeon, burbot, and many species of minnows. As any summer visitor will tell you, the BWCAW is also home to an abundant array of insects.
- Because of its unique characteristics the BWCAW was included in a list of the 50 greatest places to visit in a
  lifetime, as compiled by the National Geographic Society (NGS) in 1999. The NGS identified destinations
  that "no curious traveler should miss" and the BWCAW was included alongside places such as Antarctica, the
  Amazon, the Grand Canyon, the Giza pyramids, the Great Wall of China and the Taj Mahal.



### UNIT CLOSING

- Briefly review the words on the What is Wild? list and ask participants to think about how they would define wilderness.
- 2. Briefly review what happened during the Vote With Your Feet activity and ask participants to think about how other individuals may define wilderness differently than they do.
- Briefly review the Wilderness Act Primer Cards and remind participants that the Wilderness Act of 1964 created a legal definition of wilderness.
- Review with participants a few of the unique characteristics of the BWCAW.
- 5. Ask participants questions such as the following:
  - Is it good to have wilderness areas? Defend your answer.
  - Do you think it is good to have an Act that defines, designates and protects wilderness? Why?
  - What are the advantages and disadvantages of setting aside wilderness areas?

#### TIME: 9 minutes

#### MATERIALS NEEDED:

- What is Wild? list developed in Activity One
- Wilderness Act Primer Cards
- 3. Instructor Reference Cards: What is the Boundary Waters Canoe Area Wilderness?



# WILDERNESS PASSPORT

#### MATERIALS NEEDED:

- Unit One Wilderness
   Passport Activity Sheet
   (master in manual or
   on CD; make copies
   as needed.)
- Unit One Wilderness
   Passport stamp and
   ink pad
- 3. National Wilderness Preservation System Map



| 1. Write yo  | 1. Write your own definition of wilderness. |  |            |  |
|--------------|---|--|------------|--|
|              |   |  |            |  |
|              |   |  |            |  |
|              |   |  |            |  |
| 2. List thre | e principles or featu                       |  | ness area. |  |
|              |   |  |            |  |
|              |   |  | 7          |  |
|              |   |  |            |  |
|              |   |  |            |  |
|              |   |  |            |  |
|              |   |  |            |  |
|              |   |  |            |  |





# EXTENSIONS



- Alaska contains
   percent of all federally-designated wilderness areas in the United States.
- The BWCAW is the most heavily used wilderness in the National Wilderness Preservation System.

#### **OBJECTIVES:**

- 1. Participants will write their own definition of wilderness.
- 2. Participants will list three principles or features of a wilderness area.
- Participants will list three unique characteristics of the BWCAW as defined by the Wilderness Act of 1964.

#### INSTRUCTIONS:

- Give each participant a copy of the Unit One Wilderness Passport (master in manual or on CD).
- 2. Ask participants to complete Unit One Wilderness Passport.
- 3. Stamp each participant's passport when the section is complete.



# ADDITIONAL INFORMATION & RESOURCES

# FOR MORE INFORMATION:

The BWCA Wilderness Kit was jointly produced by the Boundary Waters Wilderness Foundation and the United States Forest Service-Superior National Forest. Both are available to answer questions regarding content, instruction, and materials of the kit.

#### Boundary Waters Wilderness Foundation

401 North Third Street Suite 290 Minneapolis, MN 55401 (612) 332-9630 Fax: (612) 332-9624

E-mail: info@friends-bwca.org www.friends-bwca.org

#### Superior National Forest

8901 Grand Avenue Place Duluth, MN 55808-1102 (218) 626-4300

Fax: (218) 626-4354

E-mail:

r9\_superior\_NF@fs.fed.us www.fs.fed.us/r9/superior

#### MIDDLE:

Read, Listen and View (Learning Area 1)

#### NON-FICTION:

- Comprehend, interpret, and evaluate information from a variety of non-fiction formats in reading, listening, and viewing.
  - Identify main ideas and supporting details.
  - Interpret presentations of data in connection with other information in the text.

#### MIDDLE:

Write and Speak (Learning Area 2)

#### INTERPERSONAL COMMUNICATION:

 Communicate effectively in a small group by giving a demonstration or presenting new information in a small group.

#### MIDDLE:

Social Studies (Learning Area 7)

#### CURRENT ISSUE ANALYSIS:

Defend a position concerning a current event or issue by demonstrating understanding of the history, facts, controversy, values, beliefs, and emotions surrounding the issue.

#### 4. Education Curriculum - Gulf Islands National Seashore

#### **Gulf Islands National Seashore Wilderness Curriculum Guide**

| Major Concepts | Activities to Explore Major Concepts |
|----------------|--------------------------------------|
| Major Concepts | Activities to Explore Major Concepts |

WEB I: What is "wilderness"?

Introductory Activity I: Gulf Islands National

Seashore wilderness slide show

• Why is wilderness important? Activity 2: *The Lorax* 

• How has wilderness been lost? Activity 3: Where Once There Was a Wood

Activity 4: Barrier Islands On the Move

• Who cares for/manages wilderness? Activity 5: The Wilderness Act

• What does wilderness mean to you? Culminating Activity 6: Wilderness Metaphors

WEB II: The Leave No Trace Ethic Introductory Activity 7: The Leave No Trace Ethic

• Plan ahead and prepare. Activity 8: Be Prepared!

Activity 9: Learning Centers:

Learning Center A: Keeping an Eye on the

Weather

Learning Center B: Map Skills Learning Center C: Using a compass Learning Center D: Knot-tying Learning Center E: Seeing Night Skies

Travel and camp on durable surfaces.
 Activity 10: Hiking and Camping on Wilderness

Barrier Islands

Dispose of waste properly. Activity II: Marine Debris

Leave what you find.
 Activity 12: Beachcomber's Treasures

Minimize campfire impacts. Activity 13: Fire!

• Respect wildlife. Activity 14: Way Stations for Migrating Monarchs

Activity 15: Nesting Creatures

Culminating Activity 16: Wilderness: Conviction of

the Heart

#### 4. Education Curriculum - National Geographic Society

#### Overview

This lesson introduces students to the concept of wilderness and the role that wilderness preservation has played throughout American history. Students will conduct research on different historical wilderness issues or events, and analyze those events in the context of the political and cultural climate of that particular time.

#### Connections to the Curriculum

Geography, Environmental Studies, American History

#### **Connections to National Geography Standards**

Standard 6: How Culture and Experience Influence People's Perceptions of Places and Regions Standard 13: How the Forces of Cooperation and Conflict Among People Influence the Division and

Control of Earth's Surface

Standard 14: How Human Actions Modify the Physical Environment

#### Time

Three to four hours

#### Materials

- Internet access
- 2. Wilderness fact sheet: www.wilderness.net/nwps\_agencies.cfm
- 3. Wilderness timeline www.wilderness.net/nwps/learn.cfm

#### **Objectives**

Students will be able to:

- · Define wilderness.
- Describe key players and events in the history of wilderness preservation.
- · Research and analyze one historical wilderness issue or event.
- Design a newspaper from the day of their assigned wilderness event; link the wilderness event to politics, culture, and other historical events.

#### Opening

#### I. What is wilderness?

Ask the students to list words or phrases that come to their mind when they hear the word wilderness. Divide the students into small groups and give each group a different quotation about wilderness. Ask each group to take a few minutes to discuss their quotation, and to try to determine the author's perspective on wilderness. How might the author define wilderness? What do you think the author thinks is the purpose or role of wilderness?

#### Possible quotations to use:

We simply need wilderness available to us, even if we never do more than drive to its edge and look in.

—Wallace Stegner, 1960

(Wilderness preservationists) worship trees and sacrifice human beings to those trees. They want to save things they like, all for themselves.

— Charles Fraser, paraphrased in *Encounters with Archdruid*, by John McPhee 1971

Wildlife once fed us and shaped our culture. It still yields us pleasure for leisure hours, but we try to reap that pleasure by modern machinery and thus destroy part of its value.

— Aldo Leopold 1948

Without enough wilderness America will change. Democracy, with its myriad personalities and increasing sophistication, must be fibred and vitalized by regular contact with outdoor growths—animals, trees, sun warmth and free skies—or it will dwindle and pale.

— Walt Whitman

In wilderness is the miracle of life, and behind it our scientific accomplishments fade to trivia.

— Charles Lindbergh, 1967

We did not think of the great open plains, the beautiful rolling hills, and winding streams with tangled growth, as "wild." Only to the white man was nature a "wilderness" and only to him was the land "infested" with "wild animals" and "savage" people. To us it was tame. Earth was bountiful and we were surrounded with the blessings of the Great Mystery.

—Chief Luther Standing Bear, of the Oglala band of Sioux.

Nature is no great mother who has borne us. She is our creation. It is in our brain that she quickens to life.

—Oscar Wilde

Wilderness lovers like to speak of the equal rights of all species to exist. This ethical cloaking cannot hide the truth that green missionaries are possibly more dangerous, and certainly more hypocritical, than their economic or religious counterparts.

Ramachandra Guha

- 2. After each group has discussed their own quotation, conduct a "human likert-scale" activity with the whole class: Place a sign that says AGREE on one side of the room and DISAGREE on the other side of the room. Have the groups read their statements or quotations about wilderness and have the rest of the students move to the place in the room that best represents their own opinion on the statement. A student who strongly agrees with a statement should walk all the way to the AGREE side, a more neutral student should stay in the middle of the room, etc. Allow a few minutes of discussion on some of the quotations; as students' opinions change throughout the discussion, they should move towards the appropriate spot in the room.
- 3. Discuss the different ways that wilderness was represented in these quotations. What are reasons for such different perspectives on wilderness? (the time period, the different values of the author, the context in which it was said) Explain that throughout American history, wilderness has meant different things to different people; there have been debates about what it *is* and what, if anything should be "done" with it. Explain that they will each research a particular moment in the history of wilderness preservation, and analyze the different perspectives of wilderness represented in the debate.

#### Development

- I. Before giving the assignment, go over some background information on wilderness. Hand out, or use an overhead to display the Definition of Wilderness section of the 1964 Wilderness Act (http://www.wilderness.net/nwps/legis/nwps\_act.cfm). Explain that the legal definition of wilderness is based on this law, which sets aside portions of public lands to be preserved and protected from development. Hand out the one-page wilderness fact sheet (www.wilderness.net/nwps\_agencies.cfm) and the wilderness timeline http://www.wilderness.net/nwps/learn.cfm. BRIEFLY, discuss the basics of wilderness designation.
- 2. Divide the students into small groups; give each group one of the following newspaper headlines and corresponding year:

"New York voters' approval of new constitution preserves Adirondack Park as Forever Wild," 1894

"Despite protests from wilderness supporters, President Wilson signs law allowing a dam to flood Yosemite's Hetch Hetchy Valley," 1913

"Conservation leaders establish new organization called The Wilderness Society; Forester Bob Marshall takes command," 1935

"Sierra Club director, David Brower, leads successful opposition to development at Dinosaur National Monument," 1955

"President Lyndon Johnson signs landmark wilderness legislation," 1964

"President Carter signs Alaska National Interest Lands Conservation Act (ANILCA), adding 56 million acres to the National Wilderness Preservation System," 1980

"California Desert Protection Act brings the National Wilderness Preservation System up to 104.7 million acres," 1994

Have each group of students create a newspaper or front page of a newspaper that includes their assigned headline. They should research other events that took place during that year and can include in their paper other news stories, editorials, advertisements, cartoons, etc.— as long as they are all historically accurate in both content and style. The article corresponding to their assigned headline should be an analysis of that wilderness event that:

- Provides basic factual information about the event or issue.
- Describes any debate that led to this event, describing the main arguments of those supporting this action and those opposing it.
- Links the event to other events occurring in the United States at the time; explains what, if any, influence the current political climate had on their wilderness event.

#### Closing

Have each group give an oral presentation of their newspaper to the rest of the class. One option is to present a skit in which a group of people or a family reads their newspaper and discusses the day's news with each other. They could also present a news "broadcast" that highlights the day's events.

#### Assessment

Give the students copies of all of the groups' newspapers. Using the newspapers as the main resource, have each student write an essay on trends in wilderness preservation history, and on how wilderness preservation has been linked to other events and political issues throughout American history.

#### **Extending the Lesson**

Have the students role-play a debate on one of these historical wilderness issues, or have them research a current wilderness issue and analyze it within the context of politics and culture. One issue the students could research is the current debate about drilling for oil in the Artic National Wildlife Refuge. Have the students design a current newspaper front-page, summarizing the ANWR debate and the most relevant related issues and news stories. OR, ask the students to predict how this issue will be resolved in the future and have the students design a newspaper front page in the year 2007.

Have the students pretend that Congress has proposed a new holiday to honor or commemorate American wilderness. Have the students submit a "design proposal" for that new holiday to Congress that includes a description of what this commemoration should be like. Should it be a happy celebration? A somber memorial? How should the history of American wilderness be represented? Their design can include sketches, maps, or whatever they need to make their proposal compelling.

#### **Related Internet Links**

www.wilderness.net www.wilderness.org

#### 4. Education Curriculum - Olympic National Park

#### Olympic National Park Advanced Wilderness Education Experience Summary - Bryan Bell

In August 2002 Olympic Park Institute (OPI) and Olympic National Park (with financial help NPS Leave No Trace funding) hosted the Advance Wilderness Education Experience, a 13-day program designed to introduce nine high school-aged students from the North Olympic Peninsula of Washington State to Olympic National Park, the Olympic Wilderness, and to Leave No Trace (LNT).

The program began on the afternoon of August 10 at the OPI campus located on the shores of Lake Crescent at the northern end of the park. The program was lead by two OPI instructors and WRO Leave No Trace Coordinator Bryan Bell (ONP). On Sunday the students were introduced to the idea of federally designated Wilderness; what wilderness means to different people; why wilderness is important and to Leave No Trace camping. Each student was given an LNT topic to teach to the rest of the group. On Monday the group headed out to the Wilderness Coast of Olympic National Park for a three-day backpack trip. The group would learn to deal with tides; steep rope ladders that are used to access overland trails around hazardous headlands; teach each other wilderness skills and Leave No Trace topics; watch some amazing sunsets and moonsets as well as enjoy the Perseid Meteor Shower. The students would complete the requirements to become LNT Trainers by the end of the course.

After three sunny days on the coast, the group returned to the OPI campus for 2 nights to regroup and repack for the next hike. After a few good hot meals in the OPI dining hall, the group was ready to head out on the next hike up to the Seven Lakes Basin in the Sol Duc area of the park. The first night was spent at Sevenmile Camp where the group participated in a debate on wolf reintroduction at Olympic National Park. Each student was given a group to represent and a perspective to debate. This activity proved to be one of the best experiences in the 13-day program. At times during the debate, we were rolling on the ground laughing and at others we wept.

Another LNT activity for the second hike was for each student to formulate two or three questions relating to their LNT topic that each would ask visitors encountered along the trail. This activity also proved to be a great learning tool for the students and for the instructors. Some of the visitors gave the students great ideas of how they Leave No Trace and at other times the AWEE students were able to educate other visitors how to Leave No Trace.

Each student had their own personal journal that contained blank paper for writing and sketching as well as Wilderness Quotes and selections from wilderness writers like Aldo Leopold. At different times throughout the hikes and on the OPI campus, the students were asked to write poems; write down something inspiring; or sketch something in their journal. Many of the writings and/or sketches were very inspiring. At times, the instructors were blown away with some of the beautiful poems and drawings the students read or showed to us.

Here is an example:

The wolves' howls are missed Long mournful sounds, gone away Replaced by silence

Small and gentle thing Ladybug on my hand Safety and peace found

A Mystical thing Magic in our hearts and minds Believe in Magic

-Kris

The last major component of the program was on the second to last day when a group of kids from the Port Angeles Boys and Girls club visited OPI. The B&GC kids would spend the night at OPI and the AWEE students acted as mentors and taught the B&GC kids about Olympic National Park, plants, wildlife, ecosystems and much more.

In my humble opinion, this type of education should be a focus of the National Park Service and any other organization interested in wilderness education. Many of the students were reluctant to leave after the closing ceremonies. They learned a great deal about wildness, wilderness, national parks, wilderness management issues, themselves, and each other. These kids will never forget their experience, and neither will I.

Hold on though! The students went home but the program is not over. Over the next year, the AWEE students will participate in a number of other programs. There will be a few more Boys and Girls Club campouts at OPI, Student naturalist programs at the park and I will work with interested AWEE students to develop a web site by kids for kids about the Olympic Wilderness and Leave No Trace.

If anyone has questions about the AWEE program or would like more details, please feel free to contact me.

Special thanks to Kathy Farrier formerly of Olympic Park Institute and now at Great Sand Dunes National Monument for doing a lot of the work to make this program happen and thanks to OPI instructors Erik Wilson and Tracy Beals (now LNT Trainers) as well as Kathy's replacement at OPI Kaeley O'leary for all of their hard work and commitment and especially for the love for the park and for wilderness.

Bryan Bell Olympic National Park 600 East Park (360) 565-3102 bryan\_bell@nps.gov

#### 4. Education Curriculum - Olympic National Park

#### Olympic National Park Advanced Wilderness Education Experience Program - Erik Wilson

"Some notes on the program: It rocks—Many students are seeing the backcountry for the first time and loving it, friendships are being made that could potentially last a while, and we have a connection with them that goes beyond just natural history or teaching. It is a connection that sponsors them in the community. I consider this, as an instructor and philosophically (in environmental education), the finest program OPI runs. The LNT theme worked out beautifully."

Aug. 17, 2002 – Journal entry CB FLATS, ONP Erik Wilson, 3rd year Instructor

#### SATURDAY 8/10:

An entire afternoon of preparation and building understanding of the program and participants.

- Commitments and contract agreements
- Campus Tour
- Islands (Migration Station) challenge
- Free Time
- Name game with Frisbee
- · Hopes and fears
- · Overview of program with white board
- · Creating the ideal community exercise
- Musical painting for journal covers
- What is wilderness? Journal exercise
- · Night walk and meteor shower observations

#### SUNDAY 8/11

Preparation for Backpacking and Leave No Trace introduction.

- · Complete journals
- · Whale watch
- · Montreal canoe session to mouth of Barnes Creek, with lecture and discussion on history of ONP
- · Packing lesson with white board and OPI gear
- · Pack the backpacks
- · LNT video
- LNT talk and skit preparation
- LNT skits
- · Tie dye bandanas for journey
- · Check-in with nature writing readings

#### MONDAY 8/12:

Coastal hike. Third Beach to Scott's Creek

- Pack
- · Collect bear canisters from Forks
- Hike
- LNT talks
- · Wading in the ocean
- · Set up camp
- Wilderness Act discussion
- · Check-in
- Sunset journal Senses poem

#### TUESDAY 8/13:

Day hike to Toleak Point. Wilderness theme

- · Hike to Toleak Point
- · LNT talks
- Tide-pool lessons and exploration
- Sketching- 10sec, then 30 sec, then 2 min periods of sketching different subjects
- · Wading in the ocean
- · Alcans and Bumbas, and cultural discussion
- Electric fence challenge
- Wallace Stegner reading to 30 min journal session
   Respond to Thoreau's quote: "In Wildness is the Preservation of the world"

#### WEDNESDAY 8/14:

#### Back to OPI

- · Hike out
- · Clean up with ice cream
- Free time
- Movie "Never Cry Wolf"
- · Wolf legends readings from "Shared Spirits"

#### THURSDAY 8/15:

Day of preparation for activities with Boys and Girls Club Students

- · Meet a tree
- · River of Slime challenge
- Laundry
- E<sub>1</sub>T<sub>1</sub> forest ecology
- · Rhythm maker game
- Predator/prey
- Deer ears
- Journals
- LNT interview questions and photo preparation
- Good mentor and leadership qualities What are my strengths? Discussion
- Food prep for backpacking
- Individual Check-in with each participant:
  - a. How are you doing?
  - b. Is there anything you can identify as something the group can work on for the next section? You can work on?
- · Skins and skulls
- Microscopes
- Activity prep for B&G club

#### FRIDAY 8/16:

Hike to Seven-Mile Group Site

- · Pack, Drive, Hike
- LNT interviews of other hikers (At the right times, the leader would introduce our group to other visitors and ask permission to question them about LNT. Each encounter averaged 2-3 questions.)
- · LNT talks
- Set up Camp
- · Wolf Debate
- · Aldo Leopold reading

#### SATURDAY 8/17:

High Divide hike from Seven-Mile Camp to CB Flats (Below Hoh Lake)

- · Pack, hike
- LNT interviews
- Set up camp
- Check-in
- Journal What have I learned on this trip?
  - a. How have I grown?
  - b. What do I want to remember from this trip?

#### SUNDAY 8/18:

CB FLATS to Deer Lake

- Pack and hike up to Bogachiel Peak
- Journal haikus and landscape sketching
- LNT interviews
- Set-up camp
- · Check-in
  - a. Highs and lows of trip
  - b. What are you looking forward to when you return to your world?
  - c. What are you not looking forward to?
- Park Management discussion -

If you were a manager of this park, how would you deal with these core issues:

- a. Human Waste Disposal
- b. Food Storage
- c. Too many people in some areas

(Discussion was then continued to bridge it from the wilderness to global issues about food, water, and overpopulation.)

#### MONDAY 8/19:

Deer Lake out to Sol Duc Falls TH

- Sleep in
- · Pack and hike
- · LNT interviews
- · Set up camp at OPI
- Clean up gear and selves
- · B&G club prep
  - a. Schedule overview
  - b. Attention getters
  - c. Discipline
  - d. Positive attitude
- Campfire
  - a. Songs
  - b. Trail skits
  - c. Stories
- B&G club schedule
- Sunset (epic!)

#### TUESDAY: 8/20

#### **BOYS AND GIRLS CLUB!**

- Tents up
- Prep time for activity leaders
- Overview of B&G club with Kaeley
  - a. Role Modeling
  - b. Behavior
  - c. Discipline
  - d. Touch
- · Boys and Girls Club arrival
- Nature names name game
- · Campus tour
- · Trail skits by AWEE students
- · Walk to meadow
- · Deer ears
- · To cedar, build a tree
- · Whale watch
- · Skins and skulls
- · Predator-prey
- Free time with AWEE students
- Cookout
- · Songs, stories, s'mores, and fun!

#### WEDNESDAY 8/21:

#### **BOYS AND GIRLS CLUB!**

- Mic lab
- · River of Slime challenge
- Earth people
- · Meet a tree
- Marymere Falls
- · Optical illusion at falls
- B&G club leaves
- B&G club wrap-up discussion
- Take down B&G club tents
- · Showers and free Time
- · Walking boards challenge
- Campfire
  - a. Memorable/hilarious moments
  - b. Writing pass: What we appreciate about each other
  - c. Candle pass: What will we take home and pass on

#### THURSDAY 8/22:

#### Closure.

- Betsy from ONP outreach introduces opportunities for future volunteer work and experiences in the park
- Small canoe session with buoys course and 20 min. reflection float off point
- One-hour solo sit with journals in Upper Barnes Creek
  - a. One thing you appreciate about the Olympic Peninsula
  - b. One goal you have while living here.
- · Evaluations with Kaeley and Scott
- Individual closing conferences with instructors
  - a. How was it?
  - b. Anything that would have made it better?
  - c. Excited about the upcoming AWEE projects this year?

- Closing ceremony with families
  - a. Certificate from OPI
  - b. Certification as LNT trainer
  - c. OPI T-shirt
  - d. Selected journal entry packet
  - e. Stories and accomplishments

As an instructor, this is an *AWEE*some opportunity, and should be approached with full commitment and preparation. Providing consistent and relevant wilderness curriculum, applying much of it to the development of the learners *Sense of Place*, will nurture a fondness of the park and of the skills to take care of it. Like most programs, the level of learning and satisfaction that will result from any AWEE is largely dependent on the students. Recruitment procedures designed to select, or encourage invested learners to join will help in the future continued success of this program.

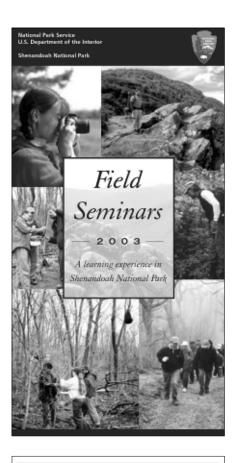
The Leave No Trace theme was a consistent and successful approach to this wilderness-based program. The students took ownership of one LNT principle and taught it to the rest of the group; they became the expert of their principle in the group, and were in charge of identifying examples in the wilderness areas as well as delivering questions to other visitors. The two different wilderness settings provided a venue for understanding the *concept* of LNT; the skills used in both places were very different, but the idea of minimum impact and Leave No Trace was the same.

The group reached a point of dramatic growth when working with the Boys and Girls Club. With much preparation from the instructors, they were prepared to lead certain activities throughout the days the B&G club students were here. Certainly some were challenged by the high level of energy and behavior of the B&G club students, but all succeeded on some level of leadership, mentorship, and role modeling. Upon departure of the B&G club, among the tired faces of the AWEE students was a strong maturity and confidence in themselves for what they just accomplished. They really felt good about what they just did, and immediately expressed interest in volunteering other times to work with them.

#### Suggestions for Next AWEE:

Habitually the group would take upwards of ten minutes to gather and begin the next activity. Perhaps during the packing lessons, efficiency with time should be suggested with more conviction. The group, like all groups, but especially this age group, rather randomly assembled from the community, takes time to really break down the barriers between individuals. Leading group discussions, guiding it towards positive input and growth, about the group and its dynamics early in the program (perhaps the second night on the Coast) could potentially facilitate the breaking of barriers and bonding of each other. The Scott's creek hike was an excellent first hike because of the challenges involved with the rugged terrain, rope ladders, and stairs. The campsite was very crowded, and it may be reasonable to hike to Toleak point as the base camp instead of Scott's Creek.

#### 4. Education Curriculum - Field Seminars, 2003, Shenandoah National Park



#### 2003 Seminars

'After attending a Field Seminar at Shenandoah National Park. I will sake with me the importance of maintaining wilders by trying to lessen the impact of my presence."

#### It's About Trout

May 24, 2003 . Cost: \$30

Shenandoah National Park's mo provide some of the most enjoyable fly fishing in Virginia. Spend a day with instructors from Trout Unlimited fishing one of the park's outstand-

ing trout streams. Learn about envis onmental factors affecting stream health as well as techniques for tying flies, casting, and identifying good trout habitat. Come with a current Virginia Fishing license and your wn gear. All fishing will be catch-and-release



#### Focus and Frame

June 7 & 8, 2003 • Cost: \$70

Shenandoah National Park, with its panor vistas, abundant wildlife, and diverse forests, is a photographer's paradise. Join professional photographers Rob and Ann Simpson and learn

the artistic and technical aspects of capturing nature film. This two-day seminar will allow time for indoor instruction, field experience, and individual feedback from the instructor

#### Stories in the Rock

July 12, 2003 . Cost: \$35

The Blue Ridge Mountains were shaped and molded over millions of years. Join Robert Badger, author of Geology Along Skyline Drive, for a day of discovering the geological story of

Shenandoah National Park. Explore a section of Skyline Drive and hike several short trails. Learn about volcanic history of the Blue Ridge Mountains and see how geology affects more than scenery.



#### 2003 Field Seminars

Shenandoah National Park

Each year, Shenandooh National Park staff team with Llocal scientists, researchers, educators, and members of the neighboring community to explore topics of mutual interest through Shenandoah National Park's Field Seminars. Whether you're interested in preserving native plants, exploring wilderness, or capturing the beauty of this region through photographs, art, or writing, Field Seminars provide an opportunity park with those who work, study, and teach here.

#### Registration

Space for each seminar is limited, so register well in advance. Registration includes entrance fee to Shenandoah National. Park, course instruction, and educational materials. To regis or to get more information, contact Shenandoah National Park's Education Office at (540) 999-3489. Or fill in and return the enclosed registration form. (Field Seminars are designed for adults ages 18 and over. Children 15-18 years of age may attend but must be accompanied by a paying adult.) Registration occurs upon payment. Refunds will be made for cancellations received 10 days prior to the Field Seminar.



#### Air Quality

August 9, 2003 • Cost: \$30

Skyline Drive is famous for its pane iews, but on some days poor air quality makes it difficult to enjoy the park's vistas. But air quality can affect more than just the view

Plants, animals, even humans, must cope with the effects of polluted air. Join park scientists and members of the neighmunity to learn about an issue that touches every

#### Preserving Nature's Wealth

August 23, 2003 • Cost: \$30

National parks preserve some of our nation's most diverse ecosystems. Spend a day in the field with park rangers and scientists to see ho they meet the challenges of preserving the divty of native flora and fauna. Learn tips for making you backyard a haven for native plants and wildlife.



#### Wilderness Challenge

September 6, 2003 . Cost; \$30

Celebrate the 39th anniversary of the Wilderness Act by exploring the wild side of Shenandoah National Park. Learn about the challenges individuals have faced in preserving

wild places and discover for yourself the wilderness values that inspired them. This strenuous 12-mile hike will explore the heart of the park's largest wilderness area

#### The Art of Wilderness

October 18, 2003 • Cost: \$40

Throughout history, artists and writers have interpreted the meaning of wilderness. Express your own perceptions on this moderate 6-mile hike through Shenandoah's wilderness and discover the values that have inspired individuals to preserve wild places. Writing and drawing supplies will be provided.





#### WildLink Project Summary

WildLink delivers science, language arts, and history lessons directly to your students via the WildLink website and brings culturally diverse students from your school to the wilderness of the Sierra Nevada on WildLink expeditions. While on the five-day expeditions, students gather atmospheric, water and vegetation data using the protocols developed by an international science

program (GLOBE). The expedition students and their data, journals, photographs, and video clips augment your classroom curriculum – making your science, art and history lessons relevant and personal! Live chats with natural resource professionals add interest to classroom curriculum and special web-based projects on the Buffalo Soldiers of the Sierra Nevada (http://shadowsoldier.wilderness.net) and Chiura Obata's Yosemite (http://obata.wilderness.net) flesh out the historical context of wild places from culturally diverse American perspectives.

Wilderness is an unparalleled medium for making the natural world come alive for young adults. Research shows that student immersion in pristine settings is often regarded as one of the best experiences of the student's life and has a major impact on personal and intellectual development. In addition, the academically rigorous activities included in the WildLink expedition and the wilderness nature of the expedition itself is shown to improve test scores and affect career interest. Since not all students are able to visit wilderness, the students on the WildLink expeditions serve as ambassadors for their peers in the classroom.

#### View WildLink at http://wildlink.wilderness.net

WildLink is a program of the Forest Service and National Park Service, and is implemented with the assistance of the following partners:

University of California, Merced

The University of Montana's Wilderness Institute

NASA's GLOBE Program

The Arthur Carhart Wilderness Training Center

The Student Conservation Association

The University of California Office of the President

The Yosemite Fund

The Yosemite Institute

#### WildLink Goals:

- To engage students in the study of wilderness with standards-based lessons and hands-on experiences.
- To encourage students to pursue higher education.
- To provide opportunities for students to pursue careers related to natural resources and wilderness.
- To increase the relevance of wilderness to the culturally diverse student in California.
- To augment classroom curriculum with student experiences, data, journals, and contact with federal land management agencies.

#### Safety Concerns:

The service providers for the expeditions are the Yosemite Institute and the Sequoia Field Institute. These organizations have exemplary safety records and some of the best-trained outdoor teaching staff in the western United States. While on the expedition, the student is supervised by a school chaperone (usually a teacher), a WildLink staff member, and Institute instructors.

#### Costs:

The Forests and Parks of the Sierra Nevada, and the Yosemite Institute cover the \$350.00 per student tuition.

#### Participating Schools:

Atwater High School, Atwater Crenshaw High School, Los Angeles Kingsburg High School, Kingsburg Livingston High School, Livingston Owens Valley High School, Lone Pine Reedley High School, Reedley Reseda High School, Los Angeles Sunnyside High School, Fresno Turlock High School, Turlock West High School, Bakersfield Woodlake High School The Detroit Metropolitan Community Center

#### Contact the WildLink Program Director for more information:

Barb Miranda, Yosemite National Park, PO Box 577, Yosemite, CA 95389 (209) 372-0735, Barbara Miranda@partner.nps.gov







A program of the Sierra Nevada Wilderness Education Project

4. Education Curriculum - WildLink, Sierra Nevada Wilderness Education Project (NPS, BLM, USFS)



# Recipes for creating YOUR parks own WildLink Expeditions and Wilderness Perspective Stories at http://wildLink.wilderness.net

#### Wilderness Perspectives:

#### Ingredients:

- A compelling story about your wilderness, park, or natural area.
   Can be historical or current. So far the stories that have been developed are from minority perspectives, but feel free to think out of the box.
- Someone to tell that story
   Should be someone with intimate knowledge, an interesting perspective, and an ability to convey the story.
- Money
   Interpretive Associations, small grants, community partners. Between \$2,000 and \$15,000 should buy you a decent site.
- A web design contractor
   Look for someone young and hungry. Someone willing to do a stellar job at a low price.

Take your compelling story and storyteller and figure out WHAT it is that makes the story interesting and broadens the current worldview of human history in wilderness. Write the content for your site. You should be looking for a web designer as you begin this inquiry. Bargain with the designer, hire him or her. Build the site you want. Place it on line on the PERSPECTIVES page at wildLink.wilderness.net and on your forest and park home pages. Market the site with schools and other organizations.

#### WildLink Expeditions:

#### Ingredients:

- Students
- Teachers
- · Backpacking equipment
- Educational Guiding Service
- Wilderness

Work with your local museum, friends organization, science institute, etc. to see if they would like to partner with you to bring students into wilderness on WildLink Expeditions. Set up a 5 day expedition into wilderness where the students learn about the human and natural history of the area and collect scientific data about the park. Have them conduct guided journaling activities. When the expedition is over, place their journals on-line at the WildLink website.

Contact the Sierra Nevada Wilderness Education Project to find out more at 209 372-0735, barbara\_miranda@partner.nps.gov or bmiranda@fs.fed.us 5. Site Bulletin – "Badlands Wilderness and Sage Creek Campground," Badlands National Park

# Badlands Wilderness and Sage Creek Campground

Badlands National Park South Dakota

"Where the Earth and Its Community of Life Are Untrammeled by Man"



This passage from the Wilderness Act gives a definition to special places in our National Parks, Forests, and other protected lands. Passed in 1964, this law gave a tangible description to something that seemed to be almost uniquely American: wilderness. Considered to be one of the most eloquent documents in American government, the Act requires federally designated wilderness to be of sufficient size to permit natural systems - communities of life - to thrive "untrammeled by man, where man himself is a visitor who does not remain." Wilderness offers itself to each of us on our own terms. Some of us are content to experience wilderness of the mind - it's enough to know wilderness exists in the world. Others are compelled to explore designated wilderness to take on its challenges. Hopefully, we do not aspire to conquer wilderness. The legal concept of wilderness has a companion inside all humans: wildness. It is this primitive quality of life that causes innovation, wonder, and exploration. Valuing the wildness in ourselves and wilderness as an American landscape brings us closer to becoming active members in the "community of life" described in the Wilderness Act.

#### A Sense of Place



The wilderness area of Badlands National Park is the largest prairie wilderness in the United States. Established on October 20, 1976 under the provisions of the Wilderness Act, the Badlands Wilderness Area consists of 64,144 acres, or over 25% of the total park. There are two units of the Wilderness Area: Sage Creek, accessed from the Sage Creek Rim Road or Sage Creek Campground, and Conata Basin, accessed primarily from the Conata Picnic Area. These two units are contiguous.

There are no established trails through the Wilderness Area. Many explorers utilize the bison trails that meander through the prairie and skirt the badland formations. Others simply choose a destination and attempt to traverse the terrain as safely as possible. People have long formed a connection with the rolling hills and protected plains of the Sage Creek drainage. In the 1910s and 1920s, the area was dotted with homesteads erstwhile settlers attempted to raise wheat and hay while grazing a few head of cattle or sheep on their 640 acre allotments. Under the Homestead Act of 1864, homesteads were to measure 160 acres; however, once settlers crossed the Missouri River, the climate and soils changed so dramatically that it was impossible for a family to survive on such a small piece of land. Homesteads west of the 100th meridian were increased in size to 640 acres. Today, hikers find remnants of these 20th century homesites. Remember that all objects at these sites are artifacts to be left in place for future study or for other visitors to discover and reflect on the difficulty in living in this beautifully barren place.

#### Looking at the Landscape

Approximately 1/3 of the Wilderness Area consists of the sharply eroded badland formations. Seemingly endless mixed grass prairie covers the remainder, providing a rich environment for wildlife. Trees are scarce but low areas harboring enough water to support shrubs are scattered throughout. Bison roam freely along with pronghorn, mule deer, and bighorn sheep. Opportunistic coyotes and bobcats seek out smaller food sources, such as rabbits or prairie dogs and their rodent cousins. Avian life ranges from eagles and hawks soaring overhead to the ground-dwelling sharp-tailed grouse and wild turkeys.

#### Regulations



The to the high winds and dry grasses, fires are not permitted anywhere in Badlands National Park. An easily combustible fuel such as grass burns at an extremely high rate. Coached by the Great Plains wind, a simple dropped match can trigger a massive wildfire in seconds. Only backpacking stoves are permitted for heating food or water.

→Pets are not permitted in the Badlands Wilderness Area. This is for their safety as well as the protection of park wildlife. They are permitted in Sage Creek Campground if they are on a leash and under the control of a human at all times.

→All camping in the Badlands Wilderness Area must be at least 200 feet away from any water source.

#### 5. Site Bulletin - "Badlands Wilderness and Sage Creek Campground," Badlands National Park



→Wildlife should never be approached within 100 yards. Badlands' wildlife is truly wild and unused to human sounds and actions, rendering them unpredictable. If an animal reacts to your presence, you are too close. Back off. If you surprise a bison, it is best to stand your ground if there is no escape route, such as up a tree or sod table. Bison can scramble into seemingly unlikely places and can run at a speed of over 30 miles per hour. →Badlands is home to one venomous snake — the prairie rattler. Prairie rattlers are considered the least aggressive of all rattlesnakes. To avoid surprising a rattler, always keep an awareness of where you are placing your hands and feet. Wear ankle high boots and heavy socks.

#### The Ways of Wilderness

By law, federally designated wilderness such as the Badlands Wilderness Area is a roadless place where wheeled vehicles are not allowed. Its primitive qualities provide people with rustic backpacking, wildlife watching, horseback riding, and true solitude. Requiring cross country travel without the presence of established trails, the Badlands Wilderness Area forces its explorers to be self-reliant and prepared. Always carry a topographic map, a compass, and plenty of water. Due to the extremely high concentration of sediments and dissolved minerals in Badlands water, hikers must carry all their drinking water with them. A gallon per person per day is suggested.

Badlands National Park does not have a backcountry permit system in place so park staff will not search for hikers unless notified by other hikers or by friends or family. Before setting out, make sure that a friend or family member knows where you are and when you plan on returning. Establish a date and time to call home to confirm your safe return.

## The Developed Areas



The Sage Creek Rim Road wanders west from the Badlands Loop Road near the Pinnacles Overlook in the northwest corner of the park. This gravel road skirts the northern edge of the Wilderness Area, offering spectacular views and wildlife viewing, particularly at Roberts Prairie Dog Town. The Sage Creek Campground, a primitive campground with pit toilets and no water, is a gateway to the Badlands Wilderness Area. The campground does not have designated campsites. Instead, campers should set up camp a reasonable distance from other campers and leave their vehicles on gravel surfaces only. Do not drive vehicles off onto the prairie. Horse users share the campground with backpackers and other recreational users. A hitching area is maintained for this purpose. No campfires are permitted in the campground. Quiet hours are from 10 p.m. to 6 a.m.

Conata Picnic Area is one-half mile from the Badlands Loop Road on the gravel Conata Road. The picnic area has covered picnic tables and vault toilets. There is no camping permitted at the Conata Picnic Area.

#### Leave No Trace

Badlands National Park is a national treasure, set aside for all visitors – now and in the future. To insure that the qualities that brought you here today are unimpaired for those who come next year and next century, Badlands requires that all park users practice principles of Leave No Trace. To this end:

Plan ahead. Be prepared for extreme weather hazards and emergencies

Travel and camp on durable surfaces. When possible, choose the established wildlife trails over "breaking new ground." The formations seem timeless; however, they change daily. Your weight on a formation will cause increased erosion. Your path through the prairie does trample seeds. Place your tent on an already denuded area, rather than impacting a new surface.

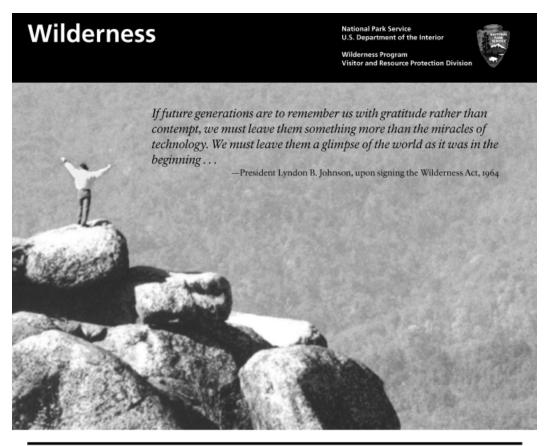
Tispose of all waste properly. You packed it in; you can pack it out. Human waste should not come into contact with any water source.

Teave what you find. Preserve the past. Examine but do not remove cultural objects or fossils. Do not pick plants.

The considerate of others. Camp at least 400 yards from other campers in the Wilderness Area.

#### A Landscape of Hope

A prairie wilderness. This seems strange to those who equate wilderness with vast, dark forests or expanses of glaciated mountains. However, it was the prairie that so daunted those who set out to settle the American West. As we attempt to assemble the great biodiversity puzzle, prairie is the heart of the piece. In establishing the Wilderness Act, we as a nation set a standard for wilderness preservation. In establishing a prairie wilderness here in Badlands National Park, we have given credence to the many faces wildness wears. It is now up to us to accept the challenge of wilderness: to come to the edge of forever and feel complete.



#### What Is Wilderness?

... an area where the earth and its community of life are untrammeled by man....

-Wilderness Act, 1964

Wilderness is a word of many meanings. From a place to be feared to a place to be revered, wilderness can evoke images of wild animals, cascading streams, jagged mountains, vast prairies, or deserts. For individuals wilderness can mean physical challenge, grand vistas, solitude, community, renewal, or respite from a complex technological society.

On September 3, 1964, President Lyndon B. Johnson signed the Wilderness Act. This law states: "A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recog-

nized as an area where the earth and its community of life are untrammeled by man . . . "

The word untrammeled captures the essence of wilderness. Simply put, untrammeled means "free of constraint" or "unhindered." Wilderness areas are places where a conscious decision has been made by the American people to let nature prevail. Here natural processes are the primary force acting upon the land and the developments of modern technological society are substantially unnoticeable.

#### An Enduring Resource

We simply need that wild country available to us, even if we never do more than drive to its edge and look in. For it can be a means of reassuring ourselves of our sanity as creatures, a part of the geography of hope.

-Wallace Stegner

The Wilderness Act went beyond defining wilderness. The goal of the Act was to preserve wilderness and the wilderness experience for future generations. But, why did Americans feel the need to preserve wilderness for future generations?

Citizens realized that even though wild lands were protected as a national park or national forest, humans could still affect the landscape in ways that diminished its natural qualities. The Wilderness Act was a response to public concern that wild areas be protected permanently by law, not subject to the discretion of agencies or administrations. This desire for permanent protection is heard in the opening words of the Wilderness Act. Congress declared: "In order to assure that an increasing population, accompanied by expanding settlement and growing mechanization, does not occupy and modify all areas within the United States . . . leaving no lands designated for preservation and protection in their natural condition, it is hereby declared to be the policy of the Congress to secure for the American people of present and future generations the benefits of an enduring resource of wilderness.'

The Wilderness Act protects not only the tangible resources of wilderness - habitat for wildlife, free flowing streams, watersheds, biological diversity, cultural artifacts and historic structures—but also the intangible "benefits of an enduring resource of wilderness."

These benefits vary according the individual who experiences or contemplates wilderness, yet exist for those who seek them. Wilderness areas provide opportunities for physical and mental challenge, self-reliance, and solitude. As a haven from the pressures of modern society, wilderness can inspire personal renewal, artistic expression, and the opportunity to explore American heritage. Some people appreciate wilderness from afar, overlooking expansive vistas of wild lands from a roadside or imagining wilderness areas in their minds.

Wilderness areas offer glimpses into the past, and provide places to imagine the future.

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EXPERIENCE YOUR AMERICA

#### 6. Articles (Park Publications) – Sand Dunes Breezes - Great Sand Dunes National Monument and Preserve

#### Celebrate a New Wilderness - Patrick F. Myers, Interpretive Ranger

"I must leave it as beautiful as I found it." —Sigurd Olson

Through dedicated hard work and inspired vision of countless individuals, the Colorado Wilderness Act of 1993 became reality, giving greater protection to much of the Sangre de Cristo range north of Blanca Peak.

Why wilderness? Why not allow logging, mining, hotels, mountain bikes, and all-terrain vehicles? According to the wilderness Act of 1964, "A wilderness ... is an area where the earth and the community of life are untrammeled by man, where man himself is a visitor who does not remain ... retaining its primeval character and influence . . . which is protected and managed so as to preserve its natural conditions." Reinhold Messner, the famous German mountaineer, was asked once why Europe has virtually no true wilderness left. He replied, "Because we had no people like Jonn Muir or Ansel Adams until it was too late." In America we still have an opportunity to protect a few remaining untrammeled areas before it is "too late." With the Sangres in particular, wilderness designation offers the unique chance to preserve an entire mountain range virtually intact, thereby protecting vital and complex ecosystems with diverse habitats.

Not all of the Sangres were included in this wilderness bill. Two 4-wheel drive corridors were left open over the Sangres: Hayden Pass in the north, and Medano Pass (accessible through the Monument). Most of the Blanca Peak massif, including the extremely difficult Blanca Peak 4-wheel road, was left out of wilderness designation. Check at the Visitors Center for specifics on the Sangre de Cristo area you wish to visit. Mechanized vehicles are not permitted in any wilderness area, including Great Sand Dunes, which became official wilderness in 1972.

The Great Sand Dunes are nestled against the rugged, spectacular Sangre de Cristo Mountains; their geology and wildlife are intimately intertwined. Yet it is the beauty of the two together which lingers in the mind and heart; the sun and shadow rhythms of the dunes rise to meet undulating lines of pine-forested hills, which in turn lift one's eyes to shining snowfields interlaced upon the jagged crest of the Sangres. Those who love the dunes may rejoice that the neighboring Sangres will essentially remain "untouched," which affirms a commitment for the continuance of leaving this magnificent region "as beautiful as we found it."

#### 6. Articles (Park Publications) - Peak Experiences - Summer, 1999, Lassen Volcanic National Park

#### What is Wilderness? - Narissa Willever, Interpretation Specialist

Ask a hundred people "What is wilderness" and you'll get a hundred different answers. To a city dweller, it may be a quiet spot in a city park. To an experienced hiker, it may be walking where no other person has walked before. To most, wilderness is somewhere in between.

More than 150 years ago, nature writer and philosopher Henry David Thoreau said, "...in Wildness is the preservation of the World." Perhaps Thoreau was telling us that raw, untamed wilderness is more than just features on a landscape; it connects the urbanized, modern human population we have become with the land we once lived closer to.

Three quarters of Lassen Volcanic National Park is designated wilderness. It contains all of the plants and most of the animal species known when the Europeans first settled here. Eagles roost in trees along icy rivers; bears forage for grasses and berries and feed on deer whose strength gave out during the long winter; bobcat pad silently across snowfields in search of snowshoe hare; and alpine meadows blaze in a glory of spring color.

These things are the heart of wilderness. Congress passed a law in 1964 establishing the National Wilderness Preservation System. The purpose of the Wilderness Act is to make sure that we "do not occupy and modify all areas within the United States leaving no lands designated for preservation and protection in their natural condition." This law required federal land management agencies to set aside unspoiled areas and manage them so they are shaped primarily by the forces of nature with the imprint of human's work mostly unnoticeable.

Passing the law was, in a sense, a way of recognizing that Thoreau's "Wildness" is fundamental to the human spirit. To extinguish the last vestiges of wildness from the country would be to extinguish something vital within us.

Today, the Wilderness System contains more than 100 million acres of Congressionally designated wilderness managed by four agencies: the National Park Service, the U.S. Forest Service, the Bureau of Land Management, and the U.S. Fish and Wildlife Service. These special lands preserve natural ecosystems and maintain species diversity. They are natural laboratories for learning and scientific research to study the forces that maintain life without human intervention. And they offer unique recreational experiences and an opportunity for solitude and spiritual renewal for all Americans. Lassen volcanic National Park Wilderness was established by an act of congress in 1972. It contains 78,982 acres and is managed by the National Park Service so visitors have an opportunity to experience solitude in a natural setting and to explore the wonders of the South Cascades at a leisurely pace uninterrupted by roads, vehicles, structures, crowds, and other symbols of today's world. Enjoy!

#### 6. Articles (Park Publications) – Peak Experiences - Summer, 2001, Lassen Volcanic National Park

#### Discovering Wildness at Cinder Cone - Narissa Willever, Interpretation Specialist

"In Wildness is the preservation of the World." —Henry David Thoreau

The hike to Cinder one is an unforgettable journey into the past, present, and future of a remarkable wilderness landscape.

At the top of Cinder Cone, the wild rustles over terrain as strange and still as the surface of Mars. Seven hundred feet below, Lassen's wilderness stretches in a varied tapestry of rippling dunes, rugged lava beds, and forests of whispering pines.

In the timeless silence, you can imagine wagons creaking by—ghosts of pioneers who traveled the Nobles Emigrant Trail in the 1850s. You can almost smell the reek of brimstone and see the fiery convulsions that produced Cinder Cone over 300 years ago.

Lassen Volcanic National Park Wilderness was established by Congress in 1972. It contains three quarters of the Park and is managed to give visitors an opportunity to experience solitude in a natural setting.

The Cinder Cone area provides wilderness access for everyone from families looking for a morning hike to backcountry adventurers seeking deep solitude.

#### **Protecting and Preserving**

One of the greatest challenges of managing wilderness is balancing visitor enjoyment with the need to protect and preserve the land, living things, history, and values embodied by wilderness.

Last October, five motorcyclists covered the fragile Painted Dunes with ruts. Even after winter snows, the landscape is still marred. Off-trail tracks in the Cinder Cone area—including footprints—leave scars that can last for years.

Lassen needs your help to prevent tragedies like this in the future. To protect and preserve your park:

- Stay on designated trails.
- · Know park rules.
- · Report any transgressions or suspicious behavior to rangers.

#### For Today and Tomorrow

In recognition of the importance of wilderness, Lassen's new General Management Plan calls for the expansion of the Park's designated wilderness by approximately 25,000 acres.

We believe that wilderness ties us to our history, reminding us of the vast, wild continent that shaped our nation's culture. Lassen's wilderness is here for your discovery, enjoyment, and inspiration today. With your help, it will be here to inspire you and others for many generations to come. Take some time to explore your park and discover for yourself the meaning and importance of wilderness!

#### Why Wilderness?

In 1964, Congress passed the Wilderness Act, which established the National Wilderness Preservation System. The Act required federal agencies to set aside unspoiled areas and manage them to preserve natural processes and minimize human impacts. Passing the law was a way of recognizing that "wildness" is fundamental to the human spirit.

Wilderness helps maintain our planet's health by preserving ecosystems and species diversity. They are laboratories for studying natural systems and serve as a benchmark for assessing human impacts in more developed areas. Wilderness offers a glimpse into a world untouched by the hectic demands of everyday life. It provides unique recreational experiences and opportunities for solitude and spiritual renewal.

# Articles (Park Publications) – Shenandoah Resource Management Newsletter - Spring 2001, Shenandoah National Park

#### Go Wild With Shenandoah! - Laura Cheek, Education Specialist

Shenandoah has something that Yellowstone National Park does not have. Wilderness. Yellowstone is wild, you say? You certainly can find the qualities of wilderness there: opportunity for solitude, a sense of unknown, natural landscapes, and wild animals. Yet, Yellowstone does not hold the ultimate protection that our country can confer on our wild lands. In order for an area to be "secured for the American people of present and future generations" as "an enduring resource of wilderness," it must be distinguished as congressionally designated wilderness ("Wilderness Act," 1964). While Yellowstone has no designated wilderness, 40 percent of Shenandoah National Park holds such distinction. This is only one aspect that makes Shenandoah's wilderness area amazing and unique.

This is the year to celebrate our wilderness area! Twenty-five years ago, October 20, 1976, the United States Congress designated nearly 80,000 acres of Shenandoah as a wilderness area, which placed Shenandoah in the National Wilderness Preservation System. In so doing, Congress protected not only the biophysical elements of the area (trillium, turkeys, and trout), but also the intangible elements (refuge for wild life, opportunity for renewal, chance to escape our hectic daily lives). The benefits transcend the wilderness boundary, for even if you never enter a wilderness area, you can still benefit through clean air and water, research, and by simply knowing that wilderness is there, as part of our society's "geography of hope." However, a wilderness area does not have to be pristine or untouched by humans. Congress recognized there was evidence of human impact on Shenandoah's land, and that humans would continue to recreate in the wilderness area. Shenandoah has 175 miles of maintained trails in wilderness, and evidence of the many families who made their homes here in the past. Wilderness areas protect these cultural resources for continued exploration and celebration by future generations.

Shenandoah's wilderness education program is particularly promoting our wilderness this year. Look for celebratory programs throughout the Park. There will be wilderness presentations offered this summer by interpretive rangers, and wilderness messages in Park newspapers, brochures, posters, and displays. In this third and final year of NRPP (Natural Resource Protection Program) grant funding, we can document some of our past successes. Last year we presented wilderness programs to over 80 employees, 490 Park visitors, and 1,000 local and national audiences. This year we expect the numbers to grow. Shenandoah has become a national leader in wilderness education and will continue to be a role model for other national parks with wilderness areas.

Celebrate 25 years of Shenandoah's designated wilderness! Explore your wilderness through hiking, seeking solitude, adventuring in the unknown, joining a ranger program, or appreciating from afar. While exploring, please take care to ensure that the benefits of our resource of wilderness will indeed endure for future generations. Go wild with Shenandoah! We have much to celebrate!

To find out more about Shenandoah's wilderness area, visit www.nps.gov/shen/home. For more information on national wilderness areas, visit www.wilderness.net.

## 6. Articles (Park Publications) – Shenandoah Overlook - Spring, 2002, Shenandoah National Park

A WILD Idea and As You Visit, Leave No Trace, - Laura Cheek, Education Specialist

Shenandoah Overlook

# A WILD Idea...

Where can you find wilderness in Shenandoah National Park? Look on a park map. Gaze from an overlook along Skyline Drive. At almost 80,000 acres, Shenandoah National Park's wilderness area is one of the largest in the Eastern United States and is a part of our country's National Wilderness Preservation System.

What is this wilderness you see? How can it be described?

We can easily describe the physical attributes of wilderness-natural sounds, no roads-but wilderness is more than that. Stating the height and hair color of your friend's character. Similarly, explaining wilderness as a place of clean water and wild animals doesn't describe wilderness character. Wilderness is difficult to define.

Wilderness is an American idea, evolving from our unique frontier history. As wild land diminished in the late 1800s, American citizens spoke up to preserve natural areas. Pressure from development continued. In 1964, the U.S. Congress passed a law that gives the strongest protection possible to selected areas of our public lands -The Wilderness Act. The Wilderness Act defines wilderness as an area "in contrast with those areas where man and his own works dominate the landscape, where the earth and its community of life are untrammeled by man." "Untrammeled" means "unrestricted, unfettered, unconfined."

In the word "untrammeled," the character of wilderness takes shape. The word connects our American heritage and our hope for the future to how we manage wild lands in the present. Nature is unrestrained, yet human actions are carefully thought through in order to maintain a sense of wildness.

Wilderness areas preserve not only a place, but an experience. There are opportunities for physical challenge and spiritual renewal, solitude and hope. In wilderness we can escape from our complex daily lives and sense our place in the natural world. Even when we simply go to the edge of wilderness and look in, wilderness provides reassurance that there are still areas in our country left to be wild.

As you hike a trail in wilderness, sit by a clear wild stream, or gaze over a wilderness area from Skyline Drive, look beyond the physical. There is more to wilderness than meets the eye. Think about the effect wilderness has on you, and the effect you have on wilderness. Contemplate the character of wilderness.

Wilderness areas are remnants of our American natural and cultural heritage that we preserve for future generations. As you explore wilderness in Shenandoah National Park, you share the experience of an American vision.



# As You Visit, Leave No Trace!

ace!

Some of Shenandoah's most popular hiking spots are also home to some of Virginia's rarest plants. Many visitors are unaware of these special plants and can unknowingly damage them. Rare and endangered plant species are another reason why every park visitor should be familiar with the principles of Leave No Trace.

Leave No Trace is an outdoor national education program that works to teach outdoor enthusiasts how to enjoy the resources without harming them. By following seven simple principles, you can help preserve the park you came to enjoy. Whether you "Travel and Camp on Durable Surfaces" to avoid trampling sensitive vegetation or "Respect Wildlife," the principles of Leave No Trace can help protect you and

Plan Ahead and Prepare. Know and follow park regulations

Travel and Camp on Durable Surfaces Stay on traits to avoid damaging tragile

Dispose of waste properly. Properly dispose of all trash, including biodegradable material.

Leave What You Find. All plants, animals, rocks, and artifacts are protected. Leave them as you find

them.

Minimize Campfire Impacts.

Fres are allowed only in pre-constructed

Fires are allowed only in pre-constructed fire grates at campgrounds, picnic areas, and day-use shelters. Respect Wildlife.

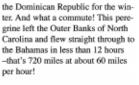
Observe wildlife from a distance. Keep park wildlife healthy by not feeding them.

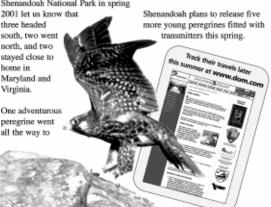
Be Considerate of Other Visitors. Excessive noise, unleashed pets, and damaged surroundings take away from everyone's experience.

Additional information about LEAVE NO TRACE can be found at www.LNLorg

# What a Trip!

FalconTrak, a multi-partner project, tracks the travels of newly released peregrine falcons. Through the project, scientists hope to learn more about this elusive bird of prey. Tiny satellite transmitters fitted on falcons released in several areas including Shenandoah National Park in spring 2001 let us know that three headed





Summer 2002

Go Wild!A Wilderness Challenge - Laura Cheek, Education Specialist



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# GO WILD! A Wilderness Challenge

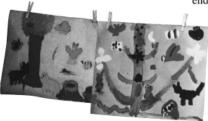
We want to hear from you! Shenandoah National Park wilderness celebrates its 26th anniversary this fall, and we need help from your students with a wilderness exhibit. We want to know what you think about wilderness, so much so that we will send you a "thank you"

accompanied by expanding settlement and growing mechanization, does not occupy and modify all areas within the United States..., it is hereby declared to be the policy of the Congress to secure for the American people of present and future generations the benefits of an enduring resource of wilderness."

wilderness areas? Share your answer in poems, drawings, songs, or writing. Please send your responses to:

Laura Cheek, Education Office Shenandoah National Park 3655 US HWY 211 E Luray VA 22835

by October 11, 2002. We will display your responses in park visitor centers during Wilderness Weekend, October 19-20, and we will send



That is what Congress thinks about wilderness.

your class wilderness materials to display in your classroom.■

People have differing definitions of wilderness, using words such as "solitude," "great expanses," and "absence of people." Some will say they can find

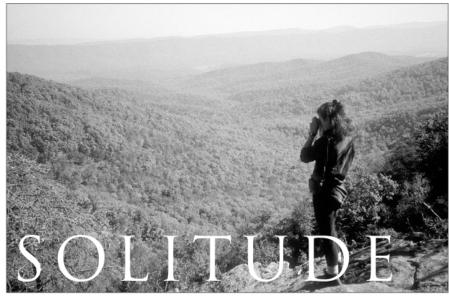
package when we receive your

response!

wilderness in Big Meadows at Shenandoah National Park, others only in Alaska. Actually, there is wilderness in Shenandoah! 40% of the park has been designated as wilderness by U.S. Congress. Congress defines wilderness as "an area where the earth and its community of life are untrammeled by man, where man is a visitor who does not remain." The reason Congress felt the need to create a system to preserve wilderness areas is stated in the first paragraph of the Wilderness Act: "In order to assure that an increasing population,

Now, here is the challenge: We want to know what your students think about wilderness. What would you expect to see or experience in Shenandoah's

Thanks for your time and energy! Be wild, and be safe!



## 6. Articles (Park Publications) – Shenandoah Overlook - Spring, 2003, Shenandoah National Park

Call of the Wild, Wilderness in Shenandoah - Laura Cheek, Education Specialist

Shenandoah Overlook

# Call of Wild!

## Wilderness in Shenandoah

What does the call of the wild sound like? Is it cascading waterfalls or the resonating caw of a raven circling a cliff top? What does the wild look like? Smell like? How do you imagine Shenandoah's wilderness? The wilderness calls to you to explore.

Approximately 4% of U.S. land is federally designated wilderness. Over 40% of Shenandoah National Park is wilderness - that's almost 80,000 acres!

You may consider Shenandoah National Park entirely wilderness. Many places within the park have a sense of wildness. from Big Meadows to the Appalachian Trail. Yet there is a distinct area within Shenandoah that has the title "wilderness" by Congressional designation. It fits the definition in the Wilderness

Act, passed in 1964: "A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man is a visitor who does not remain." To preserve the wilderness character of this area, Shenandoah manages it—maintaining trails and conducting field research—with minimal human interference.

While Shenandoah's wilderness is by definition natural, it takes human action to preserve it as such. People in the past heard the call of the wild and worked to preserve wilderness areas permanently through law. "Our expansive civilization...will eventually modify for human exploitation every last area on earth—except those that through human foresight and wisdom have been deliberately set aside for preservation."
Howard Zahniser, a resident of the Washington, D.C., suburbs, devoted much of his life to setting the vision of "a wilderness-forever future" into law. The

primary author and promoter of the Wilderness Act, Zahniser included Shenandoah National Park in the first draft of the Wilderness Bill as public land that should be considered for wilderness status. Even though in the final Act Shenandoah did not appear, voices locally and nationally continued to speak for designated wilderness in Shenandoah. Twelve years after the Wilderness Act was signed, and 31 years after



"The wilderness that has come to us from the eternity of the past we have the boldness to project into the eternity of the future." - Howard Zahniser

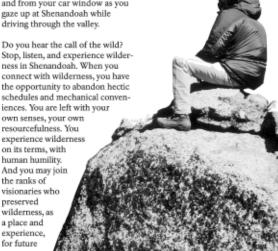
Shenandoah was established as a National Park, legislation designated 40% of Shenandoah as a wilderness area. Shenandoah is now part of the National Wilderness Preservation System, an interagency system managing wilderness areas in almost every state in America.

How can you

experience

Shenandoah's wilderness? Hike along a forest trail, carefully meander through the intertwining mountain laurel thickets, contemplate a view from a towering cliff or the edge of an overlook. Many of the views from Skyline Drive overlook a wilderness area. It may be difficult to distinguish between the undeveloped backcountry and the designated wilderness from overlooks and along trails. The trails may be narrower, with larger fallen trees to scramble over. However, the main difference defies your eyes, for it is in the level of protection.

The wilderness area is preserved with another layer of protection, so that the wilderness character will persist for future generations. Your grandchildren will be able to experience the cascading streams in Jeremys Run, the expansive vista of wilderness from Blackrock, the clear water and natural solitude in Big Run. They will be able to search for an outstanding view of Old Rag, solitary and majestic, a vision of designated wilderness. These enticing glimpses of wilderness await you, and those who will come after you, at overlooks, along trails, and from your car window as you gaze up at Shenandoah while driving through the valley





"We simply need that wild country available to us, even if we never do more than drive to its edge and look in. For it can be a means of reassuring ourselves of our sanity as creatures, a part of the geography of hope." - Wallace Stegner

generations. People who devoted their lives to protecting wilderness have passed the responsibility on to you. The continued preservation of wilderness is in your hands.

If you are inspired to learn more about experiencing Shenandoah's wilderness, please visit the new exhibit at Dickey Ridge Visitor Center. If you are planning a hike on a wilderness trail, please check with a park ranger for current information on safety and trail conditions.

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## 6. Articles (Park Publications) - Employee Newsletter - Yosemite National Park

## Wilderness Daily Reports - Gary Koy

## Wilderness Daily Report No. 1

## Wilderness - The other 95%

In 1964 the Wilderness Act passed the United States Congress by a vote of 374 to 1 (the one dissenting vote said it just didn't go far enough to protect wilderness!). In 1983 The California Wilderness Act designated 704,624 acres or 94.45% of Yosemite National Park as part of the National Wilderness Preservation System.

What does this mean? Congress, through the Wilderness Act, has mandated the Executive Branch of Government (the President, to the Secretary of the Interior, to the Director of the National Park Service, to the Superintendent, to Park Staff) to "...secure for the American people of present and future generations the benefits of an enduring resource of wilderness."

How is this done, who does it, and what does it all mean? Watch the Daily for regular installments of interesting information about Wilderness and the people who work in it.

## Wilderness Daily Report No. 2

## Wilderness - The other 95%

"An area of Wilderness is further defined to mean...an area of undeveloped federal land retaining its primeval character...managed to preserve its natural conditions and which...has outstanding opportunities for solitude or a primitive unconfined type of recreation;"

—The Wilderness Act

Last year, 49,924 people made the decision to leave the trappings of modern society behind, obtain a wilderness permit, and experience the primeval character of the Yosemite Wilderness. Despite an overall drop in park visitation, this is a 3% increase in wilderness use from the previous year.

Could it be that wilderness travelers have different motivations than the general park visitor? According to a survey of wilderness users conducted in the summer of 2001 by Peter Neuman of the University of Vermont, almost half (46 %) of the respondents had made 4 or more previous overnight trips to the Yosemite Wilderness. Seventy percent were from California and interestingly, 42% were over the age of 40. The Yosemite Wilderness has a dedicated and faithful following willing to expend extra effort in the quest for solitude or a primitive, unconfined, recreational experience.

"These mountain wildernesses may not be used by numbers of people in anywise commensurate with those who will throng the highways, but their individual service will be immeasurably greater. And as time goes on interest in outdoor America widens and deepens, their use will surely increase. It is not a matter of providing one type of recreation to the exclusion of the other. We need both, and we can have both."

—William Greeley, Chief of US Forest Service, 1927.

Watch the Daily for regular installments of interesting information about Wilderness and the people who work in it.

## Wilderness Daily Report No. 3

## Wilderness - The other 95%

"Trails...are determined to be necessary for resource protection and/or for providing for visitor use for the purpose of wilderness."

—NPS Wilderness Preservation and Management Policies, 2001

What would it cost to build Yosemite's 800-mile trail system today? Don't ask. Rest assured that park trail crews are working diligently to make sure we never have to find out. It is much cheaper to maintain a trail than to build a new one. Each summer 70 Yosemite trails staff, supplemented by crews from the California

Conservation Corps (CCC) the Youth Conservation Corps (YCC), and the Student Conservation Association (SCA), accomplish comprehensive maintenance on about 200 miles of trail. Up to a dozen packers and 70 head of stock haul the 400,000 pounds of supplies and gear that are needed each summer to support the trail crews working in the remote Yosemite Wilderness.

And what about the 1997 flood? It wiped out valley campgrounds, right? But, what did it do to trails? Twenty-seven bridge spans had to be replaced and most trails below 7,500 feet needed major repairs. The bridges have been replaced but the extra trail work caused by the flood continues.

Trail work can be tough and it can be challenging. Trail work can be coarse pick and shovel work, it can be technical design work, and it can be intricate stonemason and bridge work. It involves skills born from years of tradition and dedication. Ninety percent of the trail crew got their start as young adults working for the California Conservation Corps' Backcountry Trails Program (http://www.ccc.ca.gov/cccweb/SPECIAL/BACKCNTY/bcpage.htm).

"The design and level of maintenance a trail receives is more important to resource protection than the level of use the trail receives."

—Tim Ludington - General Foreman, R&T

(Bill Thomas is the Yosemite YCC Program Coordinator; Tammie Power, in the volunteer office, is the contact for CCC and SCA information.)

Watch the Daily for regular installments of interesting information about Wilderness and the people who work in it.

## Wilderness Daily Report No. 2

## Wilderness - The other 95%

"In furtherance of the purposes of the Wilderness Act the following lands [the Yosemite Wilderness and others]...are hereby designated as wilderness, and therefore, as components of the National Wilderness Preservation System."

—The 1983 California Wilderness Act

What is the National Wilderness Preservation System (NWPS)? Facts, just the wilderness facts:

- The National Wilderness Preservation System consists of 106 million acres of congressionally designated wilderness. (Approximately 4% of the US land mass)
- 56 % of NWPS is in Alaska (15% of Alaska).
- Of the 48 million acres of wilderness in the lower 48 states, 42 million acres are in the II Western States.
- The National Park Service manages 44 million acres or 41.7 % of the National Wilderness Preservation System (USFS 32.8 %, USFWS 19.5%, BLM 6.1%).
- 13.3 % of California (14 million acres) is designated wilderness, the largest percentage in the lower 48.

"Without enough wilderness America will change. Democracy, with its myriad personalities and increasing sophistication, must be fibered and vitalized by the regular contact with outdoor growths—animals, trees, sun warmth, and free skies—or it will dwindle and pale."

-Ralph Waldo Emerson

Watch the Daily for regular installments of interesting information about Wilderness and the people who work in it.

## 7. Articles (Non-NPS Publications) – Holbrook Tribune - Oct. 19, 2001, Petrified Forest National Park

## Wilderness: A Place Apart - Pat Thompson, Park Ranger

In 1970, 50,260 acres of high desert/grasslands in Petrified Forest National Park were set aside as designated wilderness, a place apart. This acreage joined a roster of more than 100 million acres, or approximately three percent of the nation's public lands, to be preserved in perpetuity as wilderness.

What is wilderness? According to the Wilderness Act of 1964, "wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain."

In reality, wilderness is a whole lot more. It is not just a physical location, but a state of mind and a place of the heart.

Humankind's understanding and use of wilderness have changed greatly over time. In early Judeo-Christian tradition, wilderness was believed to be a place of punishment for misdeeds or a place to prove oneself worthy of God. (Jesus' temptations occurred in the wilderness of Judea, according to Gospel accounts.) Wilderness was something to endure and then to leave behind.

Early European settlers to this country found the vast unbroken wilderness a barrier to movement and prosperity. Wilderness, which constituted some 98 percent of the country, was something to be feared and conquered. The settlers would remain, but they would change the wilderness so much that it would no longer be recognizable as wilderness. The settlers were highly successful at taming the land. Forests were cut, Native Americans subdued, resources were used up, animals and ecosystems disappeared or were greatly altered, and the wilderness area shrank to less than three percent of the country.

As wilderness areas disappeared, Americans began to realize the importance of the wild places they had impacted. Wilderness became important in its own right, a part of the unique American character. What is it about wilderness that makes it so special and why should great pains be taken to preserve it?

Today people recognize wilderness areas as destinations for pilgrimages, not places of banishment or conquest. Noted naturalist John Muir described the essence of wilderness as freedom, solitude and beauty. Wilderness creates opportunity for escape from the routine of daily life. People have chances to engage in both physical and mental challenges which renew and refresh. By preserving wilderness, this generation gives a precious gift to future generations.

Area residents can find wilderness right out their back door in Petrified Forest National Park. A large part of this wilderness can be accessed from a trail behind the historic Painted Desert Inn. After descending the trail from the parking lot, traces of man fade away, and one is free to follow heart and mind into the soft red and white clay hills.

If the hills could talk, they would tell the story of ancient times, people, plants and animals. For those who dare to venture further, the trappings of daily life are left behind, and freedom and solitude reign supreme. Quiet envelops everything. No phones, no cars, no radios, none of the many annoying distractions of daily life are to be found here. Come to the park to experience this for yourself.

Wilderness is a national resource, which the human soul cannot do without.



In 1964, Congress passed the Wilderness Act, which defined wilderness as "... an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain." Today there are congressionally designated wilderness areas nationwide, including 80,000 acres in Shenandoah.

Wilderness areas provide refuge for wildlife and solace for humans. In the wild we can find inspiration, solitude, education and recreation. Whether by

David Muench

Water usage in certain areas is skyrocketing. Please follow the park rules for maintaining healthy, adequate water resources.

the edge of a stream or at a mountain vista, we are a part of the natural world.

Even if you never enter a wilderness area, you will still reap the benefits of its existence. Clean springs feed water into local reservoirs and rivers reaching all the way to Chesapeake Bay. Scientific studies provide information on ecosystems relating to areas close to your home.

Shenandoah's wilderness is an experience as well as a place. While you explore the park, please keep in mind the importance of our "enduring resource."

A problem specific to Big Meadows is that of water. The wetland area of Big Meadows is one of the few high-elevation swamps in Virginia and is home to certain plants and animals that are rarely found elsewhere in the state. However, in the past 10 years, water usage in the Big Meadows area has doubled from 6 million gallons per year to more than 12 million gallons per year.

Occasional drought periods have further complicated the problem. Please follow a few simple practices to help conserve water in the park.

- Take short showers instead of baths.
- Turn off faucets while washing dishes, washing your face and hands, or brushing your teeth.
- Report stuck valves or dripping faucets to park service or concession employees.

Shenandoah

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www.americanparknetwork.com

Sample Educational and Interpretive Programs and Products

PRESERVING SHENANDOAH



Part of preserving Shenandoah is adhering to regulations and guidelines when participating in park activities.

Most resource managers now recognize that fire is a naturally occurring phenomenon that has a place in a healthy ecosystem. The Table Mountain pine, for example, needs fire to release seeds that will grow into new trees from its pinecones. For that reason and many others, the NPS staff occasionally use prescribed burns to maintain the vitality of forests and meadow areas.

Uncontrolled fires, however, represent one of the biggest threats to preserving Shenandoah's natural and cultural resources. In spring and fall, the park is especially vulnerable to the negative effects of human-caused fires. For more information, see "Park Regulations" on page 12.

## **LEAVE NO TRACE**

Our love of and desire to experience wild places are ultimately changing them. As park visitation increases every year, how can we lessen our impact on the land we care about? One way is to "leave no trace." A national education program, Leave No Trace (www.lnt.org) is a response to the growing use of wild lands that promotes and inspires responsible outdoor recreation. Even if it is impossible to leave absolutely no trace of our presence, there are ways of minimizing our impact. The program's guiding principles are:

- Plan Ahead and Prepare
- Travel and Camp on Durable Surfaces
- · Dispose of Waste Properly
- · Leave What You Find
- Minimize Campfire Impacts
- Respect Wildlife
- Be Considerate of Other Visitors

If you are planning an overnight trip into the backcountry or wilderness, be sure to obtain a permit and know the park's backcountry camping regulations, which are based on Leave No Trace principles and philosophy. These principles also apply to campgrounds, along the Skyline Drive, and even in your own backyard.

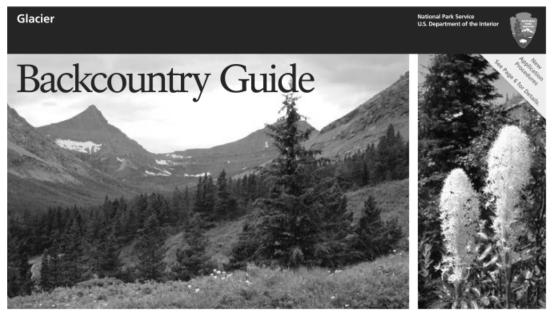
Look for the **Leave No Trace** symbol in Shenandoah. Think about leaving no trace as you stop at an overlook, walk the Limberlost Trail or camp at Big Meadows Campground. We need your help – and you can make a difference.



Shenandoah

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www.americanparknetwork.com







Bramatic vistas and delicate beauty combine to make Glaciar's backcountry a hiber's paradise, clockwise from the too left Block Beat Research Basses between Dawson and Pitemaken Passes. No Name Lake Campanyon.

# Glacier's Backcountry

GLACIER REPRESENTS THE CORE OF A VAST TRACT of wildlands often referred to as the "crown of the continent." More than 95% of Glacier's 1,013,000-plus acres is proposed for inclusion in the national Wilderness Preservation System. It is the policy of the National Park Service to manage proposed wilderness areas in accordance with the Wilderness Act of 1964 in order to protect wilderness values and characteristics until such time as Congress acts.

The fundamental tenets of the Wilderness Act most visible to backcountry visitors include:

- Prohibition of motorized equipment and mechanized transport, including bicycles and canoe carts, in the backcountry (except during emergencies or to meet the minimum requirements for the administration of the area).
- Retention of the land's primeval character and influence without permanent improvements (except for those authorized NPS administrative facilities essential to meet minimum requirements for the administration of the area and its historic structures).

During the summer camping season (May 1 to November 20), most backcountry travelers using Glacier's extensive trail system are required to camp in designated backcountry campgrounds. This policy is validated by recreation ecology research that indicates widespread resource impacts can be minimized in popular areas by concentrating use in designated sites.

You will find little evidence of human impacts or development in Glacier's pristine, off-trail areas. These vast areas offer greater solitude and challenge, but are extremely rugged, with greater inherent risks and infrequent ranger patrols. While off-trail hiking may be permissible, it is recommended only for very experienced, skilled backcountry travelers.

Glacier's backcountry has grown in popularity over the years, resulting in cumulative impacts upon the park's sensitive natural resources. High levels of backcountry use are typically concentrated in July and August, heightening the need for visitor stewardship and sound backcountry management practices.





To help plan your trip into Glacier's backcountry visit www.nps.gov/glac/activities/bcguide1.htm for additional information.

# Helpful Publications

PRE-PLANNING IS ESSENTIAL TO A SUCCESSFUL BACKCOUNTRY EXPERIENCE. Hiking books and maps are an excellent way of preparing for your trip. The Glacier Natural History Association is a nonprofit organization working with the National Park Service to assist Glacier's educational and interpretive activities, cultural programs, and special projects. They stock a number of publications that are excellent pre-planning guides. Any of the publications listed are highly recommended, and may be purchased in person or through the mail. To order by phone or to obtain a complete catalog of publications, contact:

Glacier Natural History Association, 8ox 310, West Glacier, MT 59936 http://www.glacierassociation.org gnha@glacierassociation.org - (406) 888-5756

## Suggested Publications to Assist in Trip Planning



Special Package Deal - Backcountry Users Package ... Special package price, regularly a \$44.00 value!

Includes all of the essentials needed to make your backcountry stay in Glacier enjoyable for you as well as future users. Includes: Hiking Glacier and Waterton Lakes National Parks, National Geo graphic Trails flustrated Topographic Map of Glacier and Waterton Lakes National Park, Bear Aware, Glacier National Park Nature Guide, Wilderness First Aid, and a handy Leave No Trace



Once in a lifetime vistas, like this view near Stoney Indian Pass, are commonplace in Glacier's backcountry.

## A few more things! Trip Leader Name

Using the map, highlight your route with a dark colored marker. Backcountry permit staff will use it to help identify your planned itinerary and your entry and exit point.

## Please be patient!

Because of the volume of mail and faxes we receive, you should not expect to hear back from us for at least 2-4 weeks. We will try to contact you via standard mail or email (if pro-vided) to confirm your trip request.

Due to staffing limitations, we cannot provide information regarding your appli-cation online, or over the phone. Thank you for your consideration

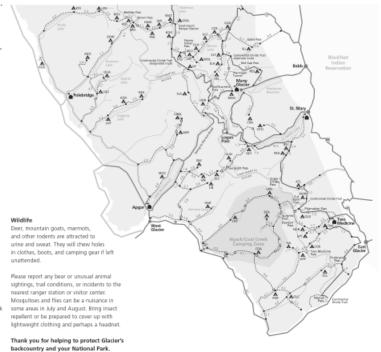
## Additional Information

## Bear-Resistant Food Containers Bear-resistant food containers are available at

most permit issuing stations for undesignated camping parties to check out, free of charge. These high impact resistant cylinders offer an excellent option for proper food storage, and are required in areas where options for proper food hanging are limited (near or above treeline, on mountain peaks, etc.).

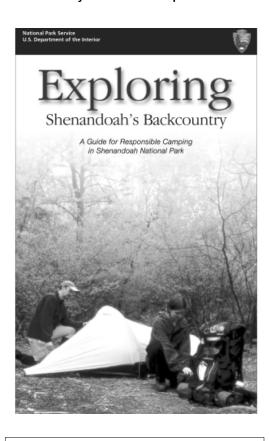
Preserving the Backcountry
If you find litter in the backcountry, please pack it out. If you cannot pack it out, please notify park rangers where it is.

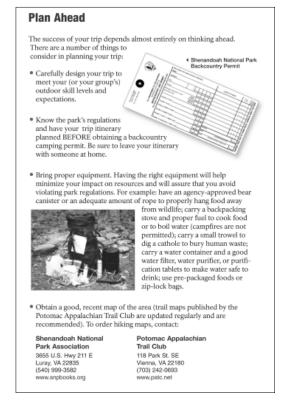
It is illegal to collect any natural or cultural resources, please leave all natural objects and cultural artifacts where you find them.

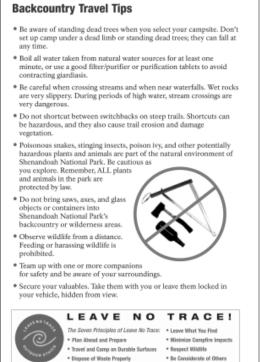


406-888-5819 (FAX) - http://www.nps.gov/glac/activities/bcguide1.htm

## 8. Backcountry Brochures - "Explore Shenandoah's Backcountry," Shenandoah National Park







Additional Information about Leave No Trace can be found at www.LNT.org



## **Backcountry Camping Regulations**

A Backcountry Camping Permit is required for all backcountry camping. The permit can be obtained at visitor contact stations during business hours. Permits for Appalachian Trail long-distance hikers are available by self-registration on the Trail near Shenandoah National Park entry points.

If you are planning your visit well in advance, permits are also available by mail from Park Headquarters. Write: Shenandoah National Park, Attn: Backcountry Camping Permit, 3655 U.S. Highway 211 East, Luray, VA 22835. Or call (540) 999-3500. Provide your name, complete address, entry and exit dates of trip, number in party, and trip itinerary, including trail areas in which you will camp. At the park, permits will be issued only between the hours of sunrise and one hour before sunset

Backcountry Campsite Regulations: When selecting an area to camp in, look for and try to camp on pre-existing campsites out of sight of trails and roads. Please do not create new campsites



Pre-existing Campsites have been created and established by prior visitor use and are not posted or signed. You must camp at least 20 yards from a park trail or an unpayed fire road.



Dispersed Camping. If you cannot locate a pre-existing campsite, you may camp on a previously undisturbed area. Please use "pristine site camping" Leave No Trace practices to minimize the impacts of your campsite. Limit your stay to one night and camp well out of sight of trails and roads and other camping groups. Otherwise, "Pre-existing Campsite" regulations apply.



Designated Campsites are park-constructed and posted to concentrate backcountry camping at specific high-use sites. Presently, designated campsites are provided only at Appalachian Trail huts to accommodate overflow camping.



are identified by a post ith this symbo

Backcountry campfires are not permitted: (except at preconstructed fireplaces at backcountry huts and day-use shelters.)

Maximum group size is limited to 10 people: Groups larger than 10 people must divide into smaller groups, obtain separate permits for each group, and camp separately as different groups. Large groups significantly affect the sense of solitude of other backcountry visitors and have a greater impact on natural resources.



Food must be stored in one (or more) of the following places:

- Hang food in a tree at least 10 feet above the ground and 4 feet horizontally from the tree trunk.
- Hang food on a storage pole provided at backcountry huts.
- Store food in a park-approved, bear-resistant food storage canister. Presently, several companies manufacture canisters which are of a design acceptable for use in Shenandoah National Park.

## Camping is permitted in specific backcountry facilities:

The Potomac Appalachian Trail Club (PATC) maintains a system of backcountry huts and cabins in Shenandoah National Park. Huts are three-sided structures along the Appalachian Trail and are operated by PATC for use by long-term hikers. Backcountry camping permits are required for camping in huts and all park backcountry regulations apply. Permits are not required for cabins, which are reserved in advance from PATC. For additional information about PATC cabins, call (703) 242-0693.

Areas closed to all camping: For distance measured in "yards," figure that one yard is equal to one of your long strides. For example, to camp at least 10 yards from a stream, take 10 long strides from the streambank and then several more to be sure you are complying with the regulation.

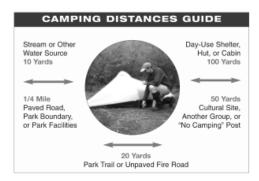
No camping may occur:

- . Within 10 yards of a stream or other natural water source.
- · Within 50 yards of standing buildings and ruins, including stone foundations, chimneys, and log walls. The park has a rich cultural history. Camping in the area of former home sites endangers the preservation of



- · Within 1/4 mile of a paved road, park boundary, or park facilities such as a campground, picnic area, visitor center, lodge, wayside, or
- · Within 100 yards of a hut, cabin, or day-use shelter. You may camp in a hut or cabin as described in this bulletin. Camping may occur in park-constructed designated camp sites at Appalachian Trail huts.





• The following areas are closed to all camping. These areas are closed to backcountry camping to preserve special resource conditions and values. They can be identified on maps and are identified by signs on trails accessing the areas.

Limberlost Trail Area (bounded by the Whiteoak Canyon Fire Road, the Skyland-Big Meadows Horse Trail, and Skyline Drive). Hawksbill Mountain Summit (area over 3,600 feet elevation). Whiteoak Canyon (between the Skyland-Big Meadows Horse Trail and the Cedar Run Link Trail).

Old Rag Mountain Summit (area over 2,800 feet elevation). Big Meadows (Big Meadows clearing area within view of Skyline Drive). Rapidan Camp (no camping within 1/2 mile of buildings).

Camping may not exceed 2 nights in one campsite location or 14 consecutive nights in the backcountry.

Properly dispose of human waste. Defecation within 20 yards of streams, trails, or roads is prohibited.

If designated facilities are provided, use them. Solid human waste must be buried in a hole at least 3 inches deep. Burying solid waste at least 3 inches in soil minimizes the potential for waste material washing into nearby water sources and eliminates the visual impact and odor of



Carry all trash out of the backcountry and properly dispose of it. "Pack it in; pack it out." Enhance the backcountry experience for all visitors by keeping it clean. Carelessly discarded food scraps and trash may be harmful to wildlife. Leave glass containers at hon

Pets must be leashed at all times and are not permitted on some trails. More information is available at visitor centers



Wilderness qualities include solitude and freedom from permanent improvement and mechanization. So, why would a hiker in Shenandoah's wilderness hear the put-put-put of a motor starting?

It may not be a motor at all, but perhaps the "drumming" display of the male **ruffed grouse**. The grouse proclaims his property rights by beating his wings against the air sounding amazingly like a distant motor starting. "To know wilderness is to know a profound humility, to recognize one's littleness, to sense dependence and interdependence, indebtedness, and responsibility."

Howard Zahniser, primary author of the 1964 Wilderness Act

# Wilderness

The Wilderness Act created a National Wilderness Preservation System and clearly defined wilderness qualities. Could land formerly used for farming and industry ever regain the primeval characteristics outlined by the Wilderness Act?

In 1975, 40 years after Shenandoah's dedication, nearly 80,000 acres of the park were added to the system. Through stewardship and management a new wilderness emerged, proving that wilderness does not have to be a vanishing resource.

## 9. Exhibits - "The Spirit of Wilderness" Interactive Exhibit, Shenandoah National Park

## The Spirit of Wilderness

Interactive Exhibit

National Park Service U.S. Department of the Interior Shenandoah National Park









## **Exhibit Objectives**

The Spirit of Wilderness is an interactive touchscreen computer exhibit that is designed to increase visitors' awareness and appreciation of wilderness and inspire them to explore wilderness, physically and intellectually, nationwide.

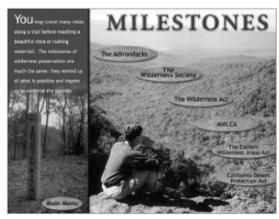
The program details the history of the Wilderness movement including introducing visitors to the people who "blazed the trail" to Congressional wilderness designation and chronicling the milestones of their journey. A third track



of the program locates and describes wilderness areas nationwide, allowing the visitor to find areas in his or her own region. A fourth track introduces the visitor to Shenandoah's wilderness and encourages exploration on foot or by car, since many of Shenandoah's areas are visible from the park's scenic highway, Skyline Drive. This section also includes information about backcountry camping in Shenandoah including the Leave No Trace principles and instructions for obtaining a permit. The "Challenge" track is an interactive quiz which gives visitors an opportunity to examine their own wilderness values and explore the challenges of managing wilderness.

## Milestones

Spirit of Wilderness Exhibit













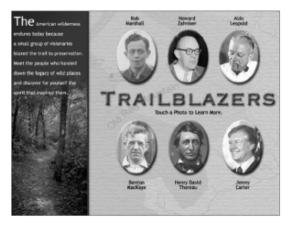






## **Trailblazers**

Spirit of Wilderness Exhibit













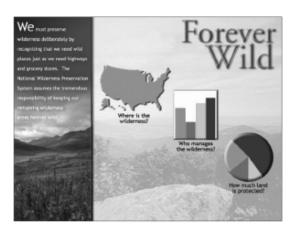






# **Forever Wild**

Spirit of Wilderness Exhibit













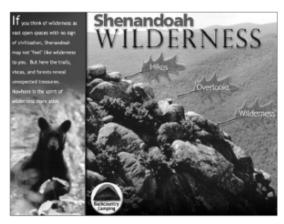






## **Shenandoah Wilderness**

Interactive Exhibit







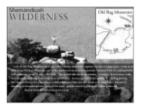






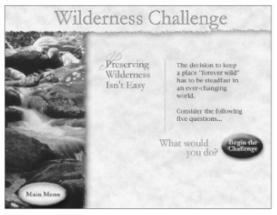






# Wilderness Challenge

Interactive Exhibit

















Office of the Superintendent 3655 U.S. Highway 211 E. Luray, VA 22835 540-999-3500 phone 540-999-3601 fax

# Shenandoah National Park News Release

For Immediate Release Contact

August 19, 2003 Lorrie Knies at 540-999-3489

## Shenandoah National Park's Field Seminar Explores the Heart of Wilderness

Shenandoah National Park will continue its summer seminar series on Saturday, September 6, with an all-day seminar entitled *Wilderness Challenge*. As part of the National Wilderness Preservation System, Shenandoah National Park manages one of the largest wilderness areas in the eastern United States. Participants will learn about the challenges individuals have faced in preserving wild places while discovering the wilderness values that inspired them.

The *Wilderness Challenge* seminar is a strenuous 12-mile circuit hike with an elevation gain-loss of 5000 feet. Participants will experience cascading streams, remote vistas, and physical challenge as they explore the heart of the park's largest wilderness area. Experts from the Potomac Appalachian Trail Club, Shenandoah National Park's Wilderness Education Program, and backcountry specialists will share their knowledge of the Wilderness Act and the significance of wilderness designation in the park. Participants will experience first-hand the challenges of preserving wilderness and wilderness values for future generations.

Advanced registration is required and space is limited. Contact Shenandoah National Park's Education Office at 540-999-3489 or go on-line at www.nps.gov/shen/2h5.htm to register or for more information. The cost for *Wilderness Challenge* is \$30. Registration includes the entrance fee to Shenandoah National Park, course instruction, and educational materials. Shenandoah National Park Association members receive a 20% discount.

Shenandoah National Park Field Seminars will continue through the fall with the following program, *The Art of Wilderness*, October 18.

10. News Releases – "Shenandoah Celebrates 25 Years of Designated Wilderness With Special Programs,"
Shenandoah National Park



Office of the Superintendent 3655 U.S. Highway 211 E. Luray, VA 22835 540-999-3500 phone 540-999-3601 fax

# Shenandoah National Park News Release

For Immediate Release Contact

September 18, 2003

Lorrie Knies at 540-999-3489

## Park Seminar Celebrates the Art of Wilderness

Shenandoah National Park will conclude its 2003 Field Seminar series on Saturday, October 18, with an all-day Seminar entitled *The Art of Wilderness*. This Field Seminar is scheduled during Wilderness Weekend, which honors the anniversary of wilderness designation in Shenandoah National Park.

From the writings of John Muir to the photography of Ansel Adams, art has played an important role in the preservation of wild places. *The Art of Wilderness* will give participants the opportunity to continue in this American tradition. The seminar includes a moderately strenuous 6-mile hike through a portion of Shenandoah National Park's wilderness. Cascading streams, solitude, physical challenge, and the colors of a changing forest will provide a backdrop for participants to express their personal views of wilderness through sketching, journaling, and writing. Experts from the Potomac Appalachian Trail Club and Shenandoah National Park's Wilderness Education Program will share their firsthand knowledge of Shenandoah National Park's wilderness resource.

Designated by Congress on October 20, 1976, Shenandoah National Park's wilderness is one of the largest in the eastern United States. Seminar participants will discover the individuals whose passion for wild places led to the establishment of laws that preserve "an enduring resource of wilderness" for future generations.

Advance registration is required and space is limited. Contact Shenandoah National Park's Education Office at 540-999-3489 or go on-line at www.nps.gov/shen/2h5.htm to register or for more information. The cost for *The Art of Wilderness* is \$40. Registration includes the entrance fee to Shenandoah National Park, course instruction, and educational materials. Shenandoah National Park Association members receive a 20% discount.

# 10. News Releases – "Shenandoah National Park's Field Seminar Explores the Heart of Wilderness," Shenandoah National Park



Office of the Superintendent 3655 U.S. Highway 211 E. Luray, VA 22835 540-999-3500 phone 540-999-3601 fax

# Shenandoah National Park News Release

For Immediate Release Contact

October 10, 2001 Laura Cheek at 540-999-3489

## Shenandoah Celebrates 25 Years of Designated Wilderness With Special Programs

Shenandoah National Park Superintendent Douglas Morris invites the public to share in the celebration of 25 years of wilderness in Shenandoah National Park by attending a special program during "Wilderness Weekend," October 19-21. According to Morris, "This is an anniversary weekend: October 20, 2001, marks the signing of legislation that designated 40% of Shenandoah National Park as wilderness."

In the United States' densely populated East, areas preserved as wilderness take on a special meaning. They are sanctuaries for human renewal, habitat for threatened animals, sites for research, and reservoirs for clean, free-flowing water. Even though Shenandoah's wilderness area was impacted by humans in the past, it is now set aside for the ultimate protection we can give our public wild lands.

Wilderness is maintained for primitive recreation, a place where opportunities for solitude abound and where there are no permanent improvements such as roads or paved trails. By designating wilderness in Shenandoah, Congress added areas of Shenandoah to the National Wilderness Preservation System that was established by The Wilderness Act in 1964.

"Wilderness areas are special places that provide unique opportunities for personal renewal and reconnection," Morris added. "Come celebrate Shenandoah's wilderness by attending a ranger-led program, enjoying solitude in the wilderness, or overlooking views of wilderness areas from Skyline Drive."

Special programs related to wilderness begin Friday night (10/19) and continue through Sunday afternoon (10/21) and vary from guest speakers to guided hikes in wilderness areas. All "Wilderness Weekend" events are offered free of charge, though some programs require advance registration.

For a list of "Wilderness Weekend" events, visit the Shenandoah National Park website at www.nps.gov/shen/. To register for programs, call 540-999-3489.

-NPS-



Media Relations Office P.O. Box 577 Yosemite, CA 95389 209-372-0529 phone 209-372-0371 fax

# Yosemite National Park News Release

## For Immediate Release

## WildLink Program Promotes Diversity in Wilderness

"I loved it here in Yosemite. I knew I had to come back," says 19 year-old Umar Abdullah, a native of Detroit. Abdullah was a participant in a WildLink expedition two years ago. Today, this high school student serves as a mentor on expeditions for a new group of students as an intern sponsored by both the Yosemite Institute and WildLink.

WildLink is an outreach program sponsored by the National Forests, National Parks, and the Bureau of Land Management in the Sierra Nevada. WildLink brings culturally diverse students from target high schools in California into the wilderness of the Sierra Nevada to conduct hands-on science projects and to journal, sketch and photograph their wilderness experiences. In the Sierra wilderness they are challenged both mentally and physically and soon learn that they have what it takes survive in wilderness and in life.

The scope of the WildLink Program extends beyond just a week in the backcountry. The students' journals, artwork and photos are displayed on the WildLink website http://wildlink.wilderness.net which also contains wilderness curriculum and links to career building sites. All WildLink participants are expected to take their experiences in Yosemite with them when they return to their homes, becoming "ambassadors" for wilderness. Whether they present their trip to a school board, community organization or to their classmates, the students share what they had learned first-hand about wilderness. The WildLink program is now in its first year of recruiting previous participants as interns, Umar Abdullah being the first.

Also accompanying students in the backcountry is Jocelyn Gretz, the WildLink program assistant for the 2002-2003 school year. Gretz, a recent graduate of the University of Wisconsin, feels that her commitment to environmental causes and desire to enhance the cultural diversity of outdoor recreationists suits the mission of the WildLink program. "I have an interest in environmental education, and I like the social aspect of this program because it reaches out to more a more demographically diverse body of students than would normally use wilderness areas," said Gretz. "It is also self-fulfilling," admits Gretz, who loves to backpack and is enjoying living in California for the first time.

"In group discussions and journaling activities we address the lack of diversity in our national parks and outdoor activities in general. Because we usually have Latino, African-American and Native American students on our trips, the dialogue is well-rounded and perhaps more productive than say, a group of affluent Caucasian men sitting in a board room wondering why our parks aren't being used by minorities," Gretz commented. She believes that, "Having an experience in the wilderness at an age where they are forming ideas of how they affect the earth is important. Our goal is not to convert them all into environmentalists, but rather to simply give them the opportunity to experience the beauty that is literally in their backyards. I feel that the Sierras speak for themselves—simply familiarizing the students with the wilderness and making them realize that *they own* Yosemite is a pretty powerful message."

How does Barb Miranda, the WildLink Program Coordinator, regard the program and the contribution of the young interns? "To me, WildLink provides a doorway for everyone, no matter what their background, their ancestry, their economic background. Wilderness is universal: there is something about wilderness that touches all of us. They get to see that, and I get to see it in these students. By the end of the week, they are so alive!"

Miranda is loves the work she does. "Wilderness experiences have given me so much, so to run a program that provides life-changing experiences to young people, and to see them coming back now on your own, makes me think wilderness might be around for a while," said Miranda.

WildLink is accepting applications for internships next year. Those high school graduates interested in spending 9 weeks to three month in Yosemite working with the WildLink program should visit http://wildlink.wilderness.net.

-NPS-

## 11. Events - "Wilderness Weekend," Shenandoah National Park



## What is wilderness?

What is self-derivated? Presonal perceptions of wilderness vary. In Shemandoch National Park, wilderness in defined by the Wilderness Act of 1964, which into this, it melderness, it consume with those mass whom near and his reduc-dantinum this landscape, it handly recognized on an area where the contributed in a winter who shows not remain. "Wilderness most such code, the melderness are the self-derivated of the remainmental for more, where earn linears in a winter who shows not remain." Wilderness most such excloped, to be used in provision and second-inderivation and are to be grosserved, uninequined, for future generations.

Why celebrate Shemonolocul's additiveness? On Ostale 20, 1978, legislation was signed designating 40% of Shemahaba. National levia an widers on the practical to part of the National Widerson Decuments of Spetter. This act indicates a did better facilities by the Marcine purple is promoted by power to the practical and in the fast. Shemahaba's witherness come preserve many benefits for us with the season of the fast. Shemahaba's witherness come process camp benefits for us with the seasons of the fast. Shemahaba's witherness come process camp benefits for us with the seasons of our sidely from the complexity of our sidely from the complexity.

## Wilderness Facts

National Wilderness Preservation System Inabished = 1964 (brough the Wilderness Act) Sur (as of 2001) = 105,778,552 acros (approximatily 6.6 % of U.S.A.)

Shenandosh National Park's Wilderness Area

Designated - 1976 Size at designation - 79,019 acres Addition - 1978 Total size - 79,579 acres

Largest wilderness area Wrangell 61. Else National Park, Alesko, 9.7 million score

Smallest wilderness area Pelican Island National Wildlife Refuge, Florida, 5 acres

States with no wilderness areas t, Delaware, Karsus, Maryland, Nebenska, Rhode Island

Federal agencies that manage wilderness National Park Service, US Forcat Service, Bureau of Land Management, US Folh and Widdie

Federal agency that manages the most wilderness National Park Service (42%)

For more information about wilderness, visit www.wilderness.net



Wilderness Weekend is sponsored by Stemedeath Nationa Park and the Stemendeath National Park Associatio

# Wilderness Weekend

Celebrating 25 Years of Wilderness in Sbenandoab National Park

October 19 - 21, 2001

## Friday Oct. 19

The Wild Side of Shomandoush. 800 p.m. to 8-85 p.m. Big Mendows Amphilibration Suscensivaling audientum areas to an amenting a sport own high test false or ranger by a cample to explore the dysplication of the 28th americancy of Standards's disriguisted artifations.

Celebrate the Wild 8:00 p.m. to 8:45 p.m. Loš Moustain Amphishusium Julia or resport around the comfort of a complicit. Come celebrate Describable 2:5 periors of inflamment and eaply the centre of Dig Ban, the English wildermess arou in Januarduck.

Statistically Net. 20th Trades Keeping Wilderness Trails Wild 9:11:30 arm, 1:6:00 p.m. Big Meadown Visitor Center. When you doll or thousandand, do you realize the head work that goar hate beinging californess resist opens? Ment more of the next machinaters from Powershaled Sciences Forth Trad Center of Political Spatishistics Trad Clob. Experience the tools like your to Jody praints withferness resources.

Unior Ranger Program at Loft Mountain
9:00 a.m. to 18:00 a.m. Loft Mountain Amphilheater
Explore the wild take of Stemandon's National Park with a park ranger!

## A Walk On the Wild Side

A wate VII title with state 2000 a.m. to 1500 g.m. Tehers Gap Orestock, mile 43-5. The three New Treel lends on two Streambole's enlikewens. Game alterner the reputery, heavily, and eignificance of Streambole's designated wilderness on this range-field falls. Streambol. of Miles.

## Film: "Wild By Law"

10:00 a.m. to 11:00 a.m. Bynd Visikor Center auditorium Coloireus 25 years of subdivenues in Semandach by wastring this documentary which highlights the bitany of the strong voices who spake up for wilderness protection to our country.

Just Development place characters libery Colstone on a false convincioning the Eig. Raw undershed, the largest utilities on an Osmanulumb, in discour year poor place in Streamander's utilities on Coronaus is wise. Group size Dank, Coll 999-3493 for renervations in advance.

Junior Ranger Program at Skyland 1000 a.m. to 11.00 a.m. Skyland Araphitheater Julio a ranger to explore the wild side of Shromodoch National Fark?

The Origin of Wildermoss
12:39 p.m. to 1:39 p.m. By of Finiter Center suditation
23:00 p.m. to 1:39 p.m. By of Finiter Center suditation
23:00 p.m. to 1:39 p.m. By of Finiter Center substantial
24:00 p.m. to 1:39 p.m. By of Finiter Summaries
24:00 p.m. to 1:40 p.m.

As Bottes in the Wild 200 pm. to 400 pm. Uniberlost trailiesd, mileyest G Was can se learn from our self lender Carbonia Boundoub's 25 years of millioness by searching for accurrencemeng the old hemisch treat of the Distinction LD wilds:

Shenandosh Appetizer 500 p.m. to 520 p.m. lig Haudow Lodge dining room guide What your subdemose appeals by burning about the significance of Stemmelook's wilders on recovers.

## Your Wilderness

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Shenondosh's Wild Side 1800 p.m. in 1845 p.m. Mathew Arm Amphibianus Come hiten to a surger share stories around a compline about the people and event that lead in the designation of the number's wilderness

## Sunday Oct. 21

A Wild Day in Shenandoah 8:50 a.m. to 9:00 a.m. Big Neudows Lodge great room Julie a ranger in Jind and bear to barse a wild day to Shenandoah.

your ar renger in just and tour to better a mild day to Sheutochook.

Tools of the Trade. Keeping Wildermees Tradis Wild.

941:94 n.m., 1-500 p.m. Big Meadown Vetter Contra.

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bette legeling wildermee makin good hit dee some of the next machinateur from

Sheutochook National Part Trad Cone and Foremen Appainablem Trad.

Chil. Experience, from hand the tools they was to help protect Sheutochook's

critikanean recovery.

Junior Ranger Program at Mathews Arm 9:00 s.m. to 10:00 s.m. Mathews here heightheater Are bears worse with its seldenseed Eightee here Stenas withtrawn arms protect habitat for withlife and business

Junior Hanger Program at Loft Mountain 9:00 s.m. to 10:00 s.m. Loft Heustein Amphilisater Do you love to explore? Join a ranger to discover the su-that call Sensendoal's wildoness bone. осиг дне навлу списыти

## Wilderness Here?

ID 00 a.m. to 3 00 p.m. Control Décries Join Mail Fardhum from the Fatomus: Appulaction Trail Club (FATC) on a bile to the Gristo Cabin-Hallotton Hollow witherness area to engkove the tetertutned lettery of Sheusendoub's celliforness, the Fotomez Appalachion Trail Club and The Appalachion Trail.

## Strenuoux Approximately 5 vales. Group size limit. Call 399-3485 for reservations in advance.

Group are task. Cas 1999-1999 for reasonables in actions. Film: "Wild By Lane". 10.00-am. to 11.00 am. Byod Vishor Carear sudmotion. Carlosses 25 years of audientous to Themacoloub by autholog the documentary which philips for the formy of the strong rotten who spoke up for artifarmous presentin in our country.

The Nature of Wilderness
11.00 a.m. to 11:20 a.m. Inh Mountain Information Center
Join a ranger to inti your wilderness involving and to discover
the encoving of Sunumbanh 2.5-year-all wilderness.

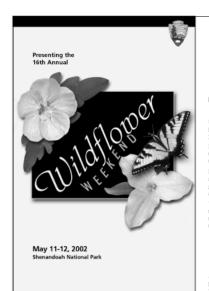
The Wilderness Way
12:00 p.m. to 4:00 p.m. North District
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the Dissocialish y Wilderness Monager State Andr on a labe exploring
the Districts District wilderness and for a chieve hade on wilderness and
whileverse management to Stateanfach over the past 15 years.

## Strensons: Approximately I order. Group size time: Cell 939-5489 for reservations in advance.

## Walk On the Wild Side

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## 11. Events - "Wildflower Weekend," Shenandoah National Park





Take a day to appreciate the tremendous diversity of wildflowers grow-ing here in the Blue Ridge. More than 1,000 species of wildflowers may be found in Sheandook National Park, a mountain island surrounded by farmland, towns, and expanding developed areas. In these ancient mountains are plants whose ancestors survived or sprang up after the last ice age over 10,000 years ago. That's quite a lineage!

National parks are havens for native woodland wildflowers, preserving not only the plants themselves, but their varied ecosystems. Here, you have many oppor-tunities to stop, observe, and be fascinated.

Look closely at wildflowers and you'll see a world of activity. Butterflies, bees, and a kaleidoscope of other insects play out their lives on flowers. Birds, mice, ground hogs, deer, and bears depend on flowers, roots, leaves, and seeds. They are all connected.

You can help ensure that wildflowers will be around for generations by leaving them unharmed where you find them. A flower that is picked can miss a chance to spread thousands of seeds. A plant that is dug up is gone forever, and all things connected to it are at a loss. If you love 'em, leave 'em!'

"When I discovered a new plant, I sat down beside it for a minute or a day, to make its acquaintance and hear what it had to tell." — John Muir

Although your pets are welcome in the park, they are not permitted on guided programs. Pets can be distracting to hike leaders and participants. Please leave your pet in the care of another person while you're on one of the Wildflower Weekend walks.

Come prepared for wet weather. Walks may be conducted in the rain, but will be canceled in case of thunderstorms or severe conditions.

## Saturday, May 11

## Birds and Buds of Pocosin

8:30 to 10:30 a.m. Migrating swopphinds are at their peak numbers here in spring. Look and listen for them as you watch for whilfflowers liming the fire moal on this walk to the rains of Poconi Mission, Obek et a Poconia protage para (mile 29), sumwarfed, east of Skyline Dirive). Limited parking, 2 miles, Total climb: about 400 ft. Dozar Hobitogev, Wishouse, Wignish adultier Plant Service, Rockinghous Bird Clab

## \*Appalachian Wildflower Folklore

9 to 10 am. From love potions to toofusche remedies, native plants have been relied upon by humans for centuries. Learn the stories behind their uses, names, and much more. Slide program. Meet at Byrd Visitor Center auditorium (milepost 51). Joil Fronti-Barr, Park Ranges, New Birer Gorge National River

This is a lovely hile through many species of native woodland flowers dececating the Appalachian Thail northward up to Bearfence Mountain. Great view near summit (3.620 ft.). Wear stardy shoes; bring water, 3 miles. Total climb about 400 ft. Meet or Lewis Mountain Perick Area (mile 57.5) Morar Meisel, Park Rouger, Shoramdoot Moriourd Park

## Trillium Trail to Hightop

Houses .

10 a.m. to 12:30 p.m.
Follow the Appalachian Trail through patches of Trillium and other wildflowers to Follow the summit of Highpon Mourtain (5.585 ft.) and a sertific view. Wear sturrly shoes; being water. 3 miles. Total climb: about 935 ft. Meet at parking area (mile 66.7). Limited parking. Ann Vonnegat, Park Ranger, Shenandoah National Park

### Wildflower Identification for Beginners

Windflower Identification for Beginners

[10:30 a.m. to note that you'd like to get to know better, this
program's for you. Learn characteristics of some flower families and key out
"mystery" flowers using a field guide. Meet at Milam Gap parking area
(mile 52.8) for an easy stroll.

Rolyn Nolon, behaviore Naturalia

## "Wildflowers in the Wilderness

10-20 am. to 3-20 p.m. Celebrate nature on this special day-hike into the park's designated wilderness along the Rose River Trail. Examine the wilderness ethic while slontifying flow-ers along the Rose River Trail. Examine the wilderness ethic while slontifying tow-ers along the second trail of the strength of the strength of the second trail of the art rocky in places. Were study shore, being lanch and water. 4 miles. Total claim! Absertly 10 ft. More of Fishers Gip Christolos (mile 49-84. Learne Pack, Edwards Descanded, Paternal Michael Park, Weng Care, Bassants, Shousackok Normal Fusk.

EXPERIENCE YOUR AMERICA

The True Nature of Things - Unwelcome Plants

30 to 11.50 a.m. thin we have been supported by the second second

## Wildflowers of the Mill Prong

[30 to 4-20] p.m.

"Showest lell of changing bubbin as you bike across former meadows, along treams and through stands of towering maples on this delightful trail leading to breakfast Herbert Hoover's former fishing retreat. Repidan Camp. Seep in place to recover storam encourages. Wear sturdy shoots, bring water, 1-4 miles, Total climb: both 870 ft. Meet at Milam Caip packing area (mile 52.5).

More of Pench-Barn, Purk Rangez, New Sturies Group's National River

## What's a Wildflower to Do?

to 3/30 p.m.

to 3/30 p.m.

seed with grazing by wildlife, crowding by shrubs and grasses, picking by popel, and burning by the National Park Service, wildflowers are at a cross the Big Meadow. Find our what's going on in this unusual wetland occoystem mid: Meat in front of Byal Visitor Center (milegos 51), our Westergar, Park Ranger, Shensondoni National Park

## igs and Blooms in the Big Meadow o 3:30 p.m. Children's program.

previous description. hew Klozik, Park Ranger, Shonandoah National Park

Sometier No.COS, Fair Rodger, Seculation removae Fair.

\*\*Levels Mountain Stroll\*\*

1 to 5 p.m.

18 samzing how many wildflowen you may see on a short bike southward of the Appelachtim Tmill Strocks your legs on this casy walls. Wear sturdy shoes by mile. Mora at Levis Mountain plants are (mile 57.5).

\*\*Mora Messel, Pairk Ranger, Sheumandord National Pairs.\*\*

## Sunday, May 12

## Mystery Wildflower Hike

PSO a.m. to acoos
The Skyland area harbres some of the park's most uncommon plant life. What
flowers will we discover on this hike down a rocky ridge to the observation
pattern an Miller Hand (J.466 ft.). Expe applitt learn, Wear study shoes; bring
soare. I fo miles. Total clinks' about 450 ft. Meet at Millers Head trailleadt from
soare. To miles. Total clinks' about 450 ft. Meet at Millers Head trailleadt from
soare to left when road feets: park in gass at top of hill.
Meet about, Park Ranger, Sharmadoch Antionof Park

## Wildflower Detectives

ugh fun-filled activities, find out how flowers work and how they're acted to lots of things, including you! Meet in front of Byrd Visitor Center

nilepost 51). sdi French-Burr, Park Ranger, New River Gorge National River

A Bear's Garden
10 a.m. to 1:30 p.m.
11 a.m. to 1:30 p.m.
11 a.m. to 1:30 p.m.
11 in is a lovely hite through many species of native woodland flowers decorating the Appalexians Trail nationard up to Bearferex Mountain, Great view near summit 1:5:00 fl. N. Weir wardy shees, bring Jurken daw Water, a sites, Total clinks: above 10 fl. Meet at Levil 3 Mountain prints are (mile 57:5).
2 for Bearaff, Wildmirer The Source Centercouncy

## Waterfalls and Wildflowers - South River Falls

10 a.m. to 2 p.m. A "percental" "Exordise Examine a wide variety of woodland flowers on this outstanding trail to a waterfall view. Steep; long upfull return. Wear stardy shoes; being lanch and water. 3.3 miles. Total climic about 850 ft. Meet at trailhead in South River pictus area (mile 62.8). And boungait, Park Rompes, Shearmarkoh National Park

conv. conveyur, rare Konger, Anneardown National Park.

\*\*Prom Tigers to Pearls — Discover Butterflies
10:30 a.m. to noon
If it weren't for Tiger Swallowaith, Pearl Crescents and many other butterflies,
we wouldn't be seeing so many wildflowers. Find out how these beautiful insects
after and rely on wildflowers on lise easy discovery walk in the Big Meadow.

%-1 mile. Meet in front of Byad Vision Center (milepox 51).

Buth Norvis, Moharter Poinvariati.

## Wildflowers of the Mill Prong

Wildinswerts or use runs - rooms I to 4 pain. It is 4 pain if the users former measures, along streams, and through towering stands of maples on this delightful trail leading to seasons, the stream of the pain is the pain in the pain is the pain in the pain is the three stream crossings. Were runsly short being stars 4.1 miles. Total climbe shorts 870 to Meet in Millian Gup parking uses fully star 4.5 miles. Total climbe shorts 870 to Meet in Millian Gup parking uses fully \$2.8). Jin Kirkwood, Volusteer, The Nature Conservancy

## Wildflower Identification for Beginners

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## \*From Tigers to Pearls – Discover Butterflies 2 to 3:30 p.m.

2 to 3:30 p.m.
If it wern't for Tiger Swallowsails, Pearl Crescents and many other butterflies,
If it wern't for Tiger Swallowsails, Pearl Crescents and many other butterflies,
we wouldn't be seeing so many wildflowers. Find out how these beautiful insects
affect and rely on wildflowers on this discovery walk along the Applachain Tital,
Nee view at Blackreck summit (3:21 fth. l.) mile. Tetal climb: about 100 ft. Meet
in front of flig Meadows Lodge (mile 51.2).
Butterflies the mineral flow of the state of the seed of

\*\*TASMS artesmand A to 5 p.m.
It's amazing how many wildflowers you may see on a short lift a maring how many wildflowers you may see on a short lift southern and along the Appulselham Trail! Streeth your legs on this easy well. \*\*In this. Went streety shows Meet at Lewis Montania plents are single 57% of Streeth Streeth and Park Marine Meeted. Park Mangor, Shemandonh Fark

. Asterisk denotes programs that are new this year.

## Meet Our Volunteers

Tom Dierauf of Albemarle County is a retired forester who has enjoyed hiking, backcountry camping, fishing, and discovering wildflowers in Shenandon's Marional Park for the post 40 years. On one memorable visit a couple of years ago, he was pleased to rediscover an uncommon filly, White Camas (Zigodowar giancus), which hadn't been seen in the park since 1949. He is a volumer with The Nature Conservancy.

Diane Holsinger of Rockingham County has led many Wildflower Weekend walks for us over the years. An avid birder and wildflower enthusiast, she is a member of the Virginia Native Plant Society, is a field trip leader for the Rockingham Bird Clob, and conducts bird surveys for the Smithsonian Institution. Throughout the past year, she has been living and historium in Maximum. birding in Mexico.

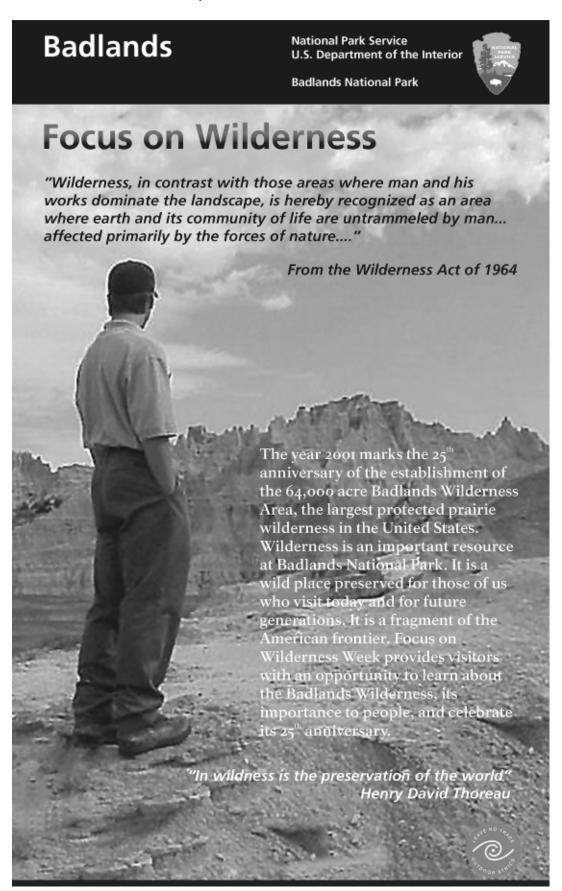
Jim Kirkwood of Augusta County has enjoyed leading wildflower outings for 30 years. He is a retirol English professor at Bridgewater College, and worked as a historian and seasonal naturalist for the National Park Service. Jim volunteers with The Nature Conservancy in Virginia, Montana, and the Virgin Islands. He was named "Volunteer of the Year" for 1999 by The Nature Conservacy's Virginia Chapter.

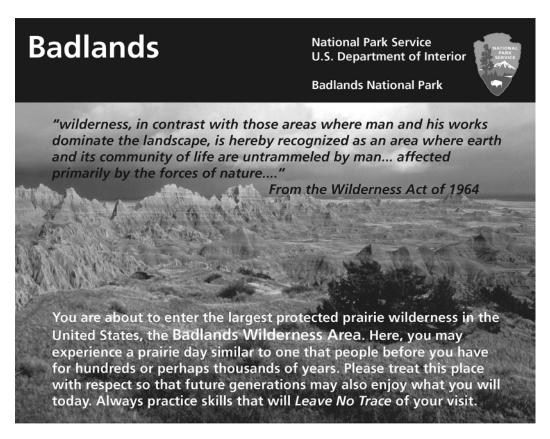
Robyn Nolen worked for several years as a ranger-naturalist at Shenandosh National Park and is now a science teacher in a middle school alternative education program in Frederick County. She and her rabbit, Timothy B., are volunteers in animal-assisted therapy in her community, Robyn excels at helping people connect with nature in a memorable way.

Barb Norris has worked seasonally for the interpretive division of Shenandoan National Park, and is now a language arts stecher in Warn County. She is a section leader for the park's annual burnerly and bird counts. Barb makes searching for nature's best-dressed insects a learn adventure. Her enthussian for butterfiles is contaging.

We would like to thank the staff at New River Gorge National River, West Virginia, for leading us Park Ranger Jodi French-Burr for the weekend. John she been leading esseonal widdforer vaules and talks in national parks for 15 years, and for six years was a guide for Bobcock State Park's annual Old Mill Wildformer Pligtriange. She has developed thecklists for flora of New River Gorge National River and brochuses on widdforer folkieer and identification







## Leave No Trace Outdoor Ethics and Skills

## Plan Ahead and Prepare

- Carry plenty of water. Temperatures can soar to well above 100 degrees. You should have at least one gallon of water per person per day. If you do find any water in the backcountry, it is not drinkable or filterable. The fine sediments will clog your water filter.
- Always make sure someone knows where you are and when you will return. The National Park Service will not search for you unless notified that you are missing. You are entering an area where you are unlikely to encounter other people.
- Fires are not permitted in Badlands National Park. Carry a lightweight camp stove.

## Travel and Camp on Durable Surfaces

- Durable surfaces include established roads, trails and campsites, rock, gravel, dry grasses or snow...
- Protect riparian areas by camping at least 200 feet from ponds and streams.
- Disperse use to prevent the creation of campsites and trails.

## **Dispose of Waste Properly**

- Pack it in, pack it out. Pack out all trash, leftover food and litter.
- Deposit human waste in catholes dug 6 to 8 inches deep at least 200 feet from water.
- · Pack out toilet paper and hygiene products

## **Leave What You Find**

- Leave fossils, rocks, plants and other natural objects as you find them.
- Preserve the past: observe but do not touch cultural or historic structures and artifacts
- Avoid introducing or transporting non-native species..Horse users must use only certified weed-free feed.

## **Respect Wildlife**

- Observe wildlife from a distance. Do not follow or approach them.
- Never feed animals. Feeding wildlife damages their health and alters natural behaviors.

## **Be Considerate of Other Visitors**

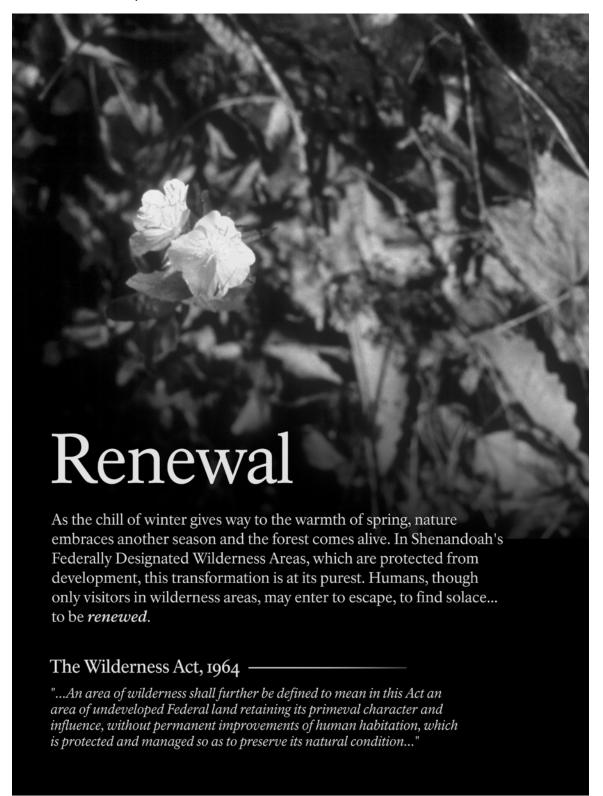
- Respect other visitors and the quality of their experience.
- Let nature's sounds prevail. Avoid loud voices and noises.



Approximately 4% of U.S. land is Federally Designated Wilderness.

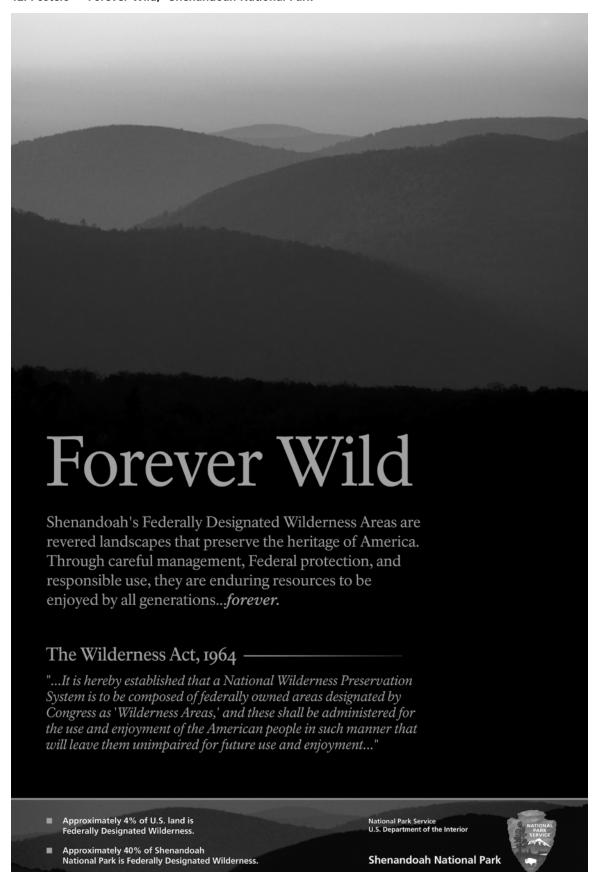
Approximately 40% of Shenandoah

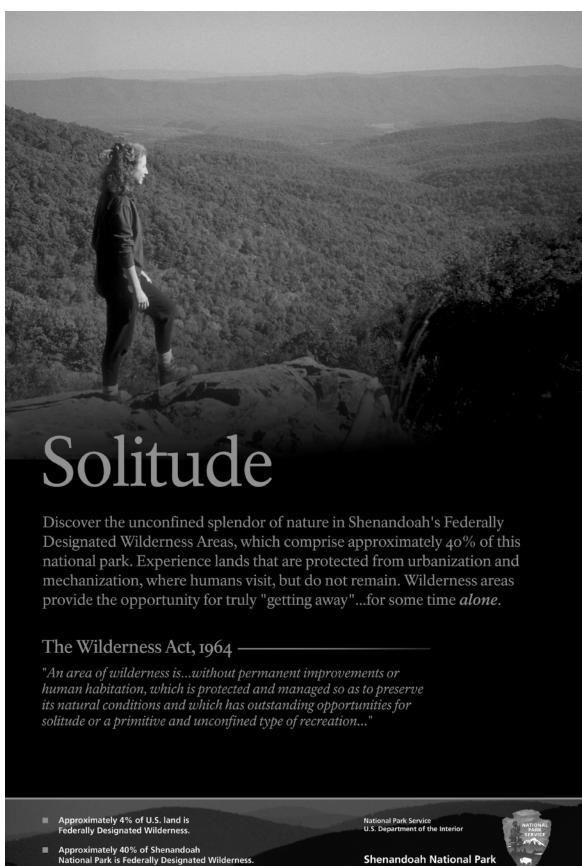
National Park is Federally Designated Wilderness.



National Park Service

**Shenandoah National Park** 







As humans continue to develop the land and our planet grows ever more populous, untrammeled land becomes increasingly scarce. Shenandoah's Federally Designated Wilderness Areas have the highest level of protection from development. Here you will find natural surroundings, and *untrammeled* land... wild places await!

# The Wilderness Act, 1964

"...In order to assure that an increasing population, accompanied by expanding settlement and growing mechanization, does not occupy and modify all areas within the United States... it is hereby declared to be the policy of the Congress to secure for the American people of present and future generations the benefits of an enduring resource of wilderness."

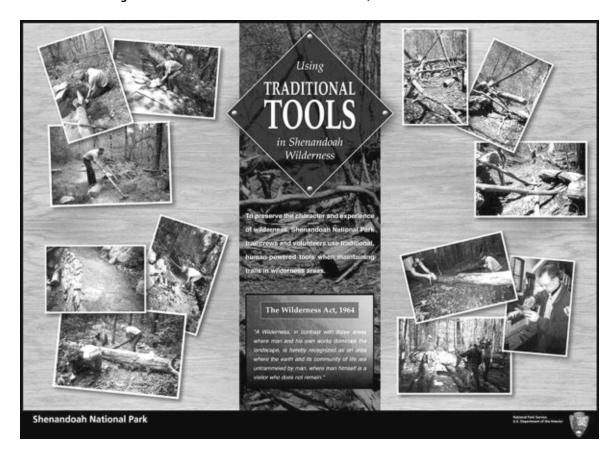
- Approximately 4% of U.S. land is Federally Designated Wilderness.
- Approximately 40% of Shenandoah National Park is Federally Designated Wilderness.

National Park Service U.S. Department of the Interior

Shenandoah National Park



## 12. Posters – "Using Traditional Tools in Shenandoah Wilderness," Shenandoah National Park



13. Multimedia – "Journeys Into Wilderness Canyons," Black Canyon of the Gunnison National Park and Curecanti National Recreation Area (www.nps.gov/blca/webvc/journey.htm)



National Park Service U.S. Department of the Interior



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# Distance Learning Program: Journeys to Wilderness Canyons

The "Journeys to Wilderness Canyons" program aired and webcast 4 half-hour videos for middle school students from around the globe. The program had subscribers from every state in the United States and several other countries. A total of 6.1 million watched and participated in the program every Wednesday in March, 2001. More than 24 million have participated so far, and the webcast portions will be available for the next three years. The shows featured Park Rangers from the Park and 10 Gunnison Middle School students exploring the ecosystem, geology and history of the area. The program also featured comparisons from around the world like Petra canyon in Jordan, the Three Gorges in China and even a canyon on Mars.

Journeys to Wilderness Canyons is a four-part learning experience designed to meet national science standards. Through inquiring and problem solving activities, students follow a journey through time to discover how these canyons have become such a powerful illustration of natural forces and human impact. The series will address (1) What is a wilderness canyon? (2) How have forces of nature shaped wilderness canyons? (3) What plants and animals live at Black Canyon? and (4) What are the human influences on wilderness canyons?

In the event you missed the initial broadcast, Journeys to Wilderness Canyons is available for download at:

http://www.nps.gov/cgi-bin/intercept? http://www.oneplaneteducation.com/canyons/curriculum.html

The program is also available in Spanish.

The program was provided by the NPS, the Satellite Education Resource Consortium (SERC), One Planet Education Network (OPEN), KLVX-PBS Las Vegas, the Weather Channel, Southwest Parks and Monuments Association, the Dept of Education's Star Schools Program, University of Pennsylvania, Harvard University and the National Park Foundation.

# Technology Integration: It Takes a Teacher to Click.

A Case Study of a Teacher Using Journeys to Wilderness Canyons, a SERC Star Schools Program

## Introduction

State and national standards increasingly reflect the best practices/effective schools research that clearly links teaching and learning outcomes to the use of technology in classrooms. Teachers are using computer based projects to integrate core curriculums and to illustrate the relevance of academics to the real world — the world that now offers few careers to those who are not adept at accessing and utilizing information from electronic resources.



Many schools, including some that were initially wary of the technological revolution in education, now enjoy increased classroom productivity attributable to teaching techniques made possible by technology. Students become engaged in concept analysis and share their ideas while computers process information related to topics being studied. They see, experience, and experiment in ways that produce critical thinking and problemsolving skills rather than reams of memorized material. In cooperative learning groups, many students (especially females) who rarely participated in discussions in their traditional classrooms have become outspoken leaders during computer-based activities.

As the hands-on, minds-on interactive qualities of computer projects, such as electronic (virtual) field trips,

engage tudents and accelerate learning, teachers and administrators use software to plan, report, and communicate more effectively in less time. Even the daunting tasks of locating funding sources and preparing grant proposals to expand a

school's technological capabilities are made easier by the wealth of information on the Internet. That information is limitless, easily accessible, and presented in mind-grabbing formats. It ignites the imaginations of students and spurs their creativity; it continuously renews teachers' enthusiasm as they see the boundaries of what they have to offer disappear, and they become energetic catalysts to create generations of life-long learners.

This case study shows how one teacher in one school discovered her first electronic field trip (*Journeys to Wilderness Canyons*) and established a team of colleagues to conduct a project that succeeded in fascinating fourth graders and attracting national attention.



## Journeys, an Electronic Field Trip

Journeys to Wilderness Canyons examines how rivers, other natural phenomena, and human activity affect landscapes and plant and animal habitats. Through the four-part series, more than a million middle school students in the United States and other countries explored the unique ecosystem in the Black Canyon of the Gunnison National Park in Colorado; they compared the canyon's environment with Petra, Jordan; Valles Marineris, Mars; and Three Gorges, China. The electronic field trips aired each Wednesday in March 2001, 1:00-1:30 p.m. (ET), and were delivered free to schools with satellite capability and/or Internet access. Registration information



was available at <a href="https://www.oneplaneteducation.com/canyons/">www.oneplaneteducation.com/canyons/</a>, and students and teachers accessed the interactive/exploratory Web site for series support materials.

Journeys, which is designed to meet national science standards, was presented by the Satellite Educational Resources Consortium (SERC) in partnership with the U.S. Department of Education, the National Park Service, One Planet Education Network (OPEN), The Weather Channel, and KLVX-Clark County School District/Las Vegas. Dan Garrison of KLVX, which produced the series, considers the Black Canyon "an amazing place," and to study the canyon, the film crew, National Park Service interpreters, and students from Gunnison area schools flew over it, hiked down it, explored its waters, and rappelled its sheer walls. "We're fortunate to have this canyon protected by the National Park Service and to have the opportunity to capture it on videotape to share with teachers and students around





George Newman, president of OPEN, thinks that *Journeys* is a significant addition to the science-based Star Schools project. "With satellite and/or Internet access, teachers and students throughout the world were able to use this instructional resource," he said.

To Wyndeth Davis of the National Park Service, the series is a way to allow thousands of students who may never visit Black Canyon to experience its beauty and "appreciate the Gunnison National Park's incredible natural resources and the area's place in geological time."

The Weather Channel's Carolyn Jones is pleased that *Journeys* viewers learn "how weather helped to create the canyon and is constantly changing its rock formations."

"Our goal is to use distance education technology to provide quality learning opportunities. Electronic field trips, such as *Journeys to Wilderness Canyons*, enable teachers to broaden the horizons within their classrooms," said Dr. Shirley Ann Smith, director of curriculum and Star Schools project director for SERC. Star Schools is funded by the US Department of Education.

SERC is a nonprofit consortium that combines the assets of state and local departments of education with public broadcasting to design, produce, and deliver educational resources. Virtual excursions offered previously by SERC include the award-winning *Journeys to Alaska* (1999) and *The Power of Volcanoes* (2000). Students in 45 states and 15 countries around the world participated in the *Volcanoes* excursion. "With the addition this year of Spanish versions of the electronic field trip and the Web site, we are broadening our scope and appealing to an even more diverse audience than in previous years," said Star Schools Project Manager Phil Hayes.

## The Barrett Experience with Journeys

During March and April, fourth graders at Barrett Elementary School in Arlington, Virginia took electronic field trips to canyons in Colorado, Jordan (Petra) and Mars (Valles Marineris). The students learned about the forces of nature that form canyons. They saw examples of the interdependence of plants and animals living in the Black Canyon of Colorado and studied the adaptations that plants and animals have had to make to live in the canyon.

The program, Journeys to Wilderness Canyons, was broadcast each Wednesday in March. Highlights for Barrett students included communicating via email with an archeologist, Dr. Leigh-Ann Bedal in Petra, Jordan, and a visit to their school by Mike Johnson, the Black Canyon park ranger featured in the broadcasts.

For one of the broadcasts, Barrett was selected to host visitors from the U.S. Department of Education, the Office of the Interior, and the Executive Office of the President. SERC provided t-shirts for the students and teachers. The 70 fourth grade students watched the broadcast in the library and took notes on animal adaptations. They then rotated through "centers," visiting canyons via the Internet in the Computer Lab, experimenting with bird beak adaptations in the Dis-



covery Lab, and dissecting owl pellets (to determine what the owls of Potomac Overlook Park eat) in the library.

Barrett's electronic field trips experience will be included in a national TV program to air in June. For more information, visit the Barrett Web site at <a href="http://www.arlington.k12.va.us/schools/barrett/">http://www.arlington.k12.va.us/schools/barrett/</a>

## Students' Comments:

On the computer, my partner and I looked at cool places that have canyons. It was awesome. The bird beak and owl pellet activities were fun.



Mars. I really liked drawing things we saw, a big horned sheep in the Black Canyon in Colorado and an old building in the canyon in Petra, Jordan.

The whole entire United States could fit in the canyon we saw on

We met Ranger Mike Johnson, a park ranger in the Black Canyon. A park ranger has to know all about the canyon and the animals and plants that live there. It was cool to meet a park ranger from Colorado.

Our field trip to the Black Canyon was an adventure, and I learned that I would like to be a wildlife ranger one day. I also liked pretending to be a bird in the beak activity and working like a real

scientist with the owl pellet.

## Journeys' Trip to Barrett

Barrett's Project Discovery Teacher, Laurie Sullivan, "discovered" *Journeys* and used the team approach to bring it to her school. (Project Discovery is a "hands-on/minds-on" activity centered learning program to promote an in-depth

understanding of mathematics and science through the use of technology and expository writing.) "When I received an oversized postcard promoting *Journeys*, I had never used a virtual field trip. The postcard intrigued me; it provided basic information and a URL. I immediately logged on, got a password, and started planning," said Sullivan.

The postcard included the following copy:

An electronic field trip designed for middle school students Available live and archived via Web cast, satellite, and videocassette

Come take a trip with us... a virtual trip... and experience an exciting new use of technology as we explore *Journeys to Wilderness Canyons*. Join middle school students from around the globe as we take this virtual field trip via satellite downlink and simulcast on the Internet to Black Canyon of the Gunnison National Park (Colorado) and other canyons throughout the world.

Journeys to Wilderness Canyons is a four-part learning experience designed to meet national science standards. Through inquiring and problem solving activities, students follow a journey through time to discover how these canyons have become such a powerful illustration of natural forces and human impact. The series will address: What is a wilderness canyon? How have forces of nature shaped wilderness canyons? What plants and animals live at Black Canyon? What are the human influences on wilderness canyons?

Sullivan's first contact was Cynthia Long, Barrett's lead science teacher. Their combined enthusiasm quickly brought the other fourth grade teachers on board. "We presented the idea to Elizabeth Burgos, Spencer Reisinger, and Amy Sack, and they agreed to work with us as a team. We also had continuous support from the instructional technology, library, reading, speech, and media staff," said Sullivan.

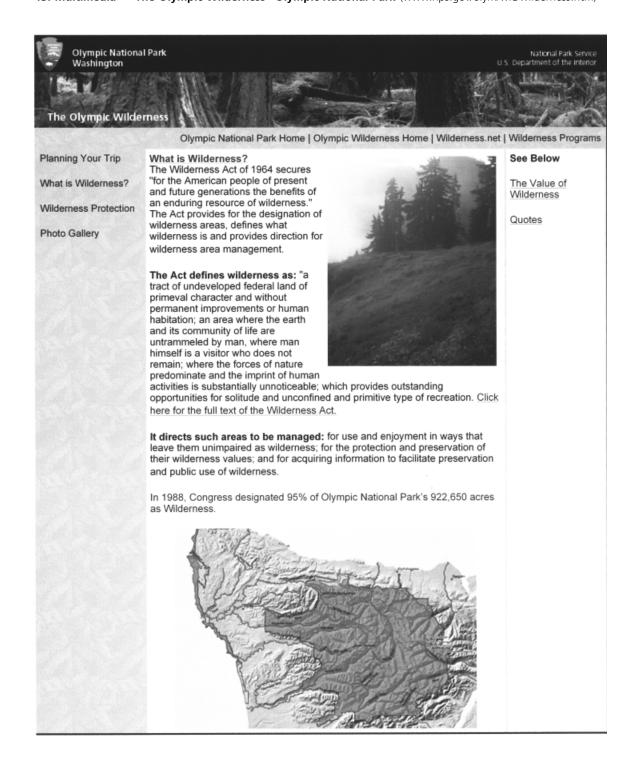
She was motivated to use the program because it tied so clearly to the fourth grade science curriculum outlined in the Virginia Standards of Learning (SOL). *Journeys*' target audience was middle school, so she knew that there would have to be some modifications, some extra effort to make it work for the fourth graders. Another challenge was that approximately 80% of Barrett students speak a first language other than English. "Video is a great way to teach all students, but the canyons video really impressed us as we watched it 'draw in' the students who are at varying stages of learning to speak English," said Sullivan. In fact, the high level of vocabulary challenged the native English speakers, but the classroom teachers worked with the HILT (High Intensity Language Training) teachers and Special Ed teachers to solve the problems.



"We did not plan to watch the broadcast live. We have early release on Wednesdays, and we wanted to preview the program first and work with the suggested activities and background information sources provided by the Web site," said Sullivan. This proved to be crucial to success because it enabled the teachers to prepare the students for the challenging materials in advance.

They made recording sheets (focus aides) to keep the students "on track." By pausing the tape many times, there was adequate time for the students to process the information that had been presented. There were also pauses for discussion and to let the students make predictions and draw pictures to better understand some of the complex elements in the video. "All students were motivated by the interaction. We loved communicating several times via email with Lee

## 13. Multimedia – "The Olympic Wilderness" Olympic National Park (www.nps.gov/olym/wic/wilderness.htm)



## 13. Multimedia – "The Olympic Wilderness" Olympic National Park (www.nps.gov/olym/wic/wilderness.htm)

Dark green shaded area = designated wilderness Orange shaded area = non-wilderness

Historically, wilderness was called a "wasteland" and a place where only vicious wild animals lurked. The lack of knowledge about these wild areas fostered fear. People were frightened of wild, untamed areas. Some still are. But spending some time in the wilderness, usually reveals that this is not a place to fear but a place of wonder, beauty and enjoyment that should be respected and protected.

## What is the Value of Wilderness?

Wilderness provides.

- ...the highest level of protection for some of the most pristine and least manipulated wildlands in the United States.
- ... critical habitat for rare and endangered species of plants and animals as well as protection of other vital components of healthy and diverse ecosystems such as air quality and watersheds.
- ...a sense of wildness, which can be valuable to people whether or not they actually visit wilderness. Just knowing that wilderness exists can produce a sense of curiosity, inspiration, renewal, imagination, hope and potential.
- ...extraordinary and challenging recreational opportunities, allowing present and future generations the opportunity to experience risk, reward, and self-
- ...the opportunity to explore societal and personal values as they relate to the use and appreciation of wildlands where humans are temporary visitors, not permanent residents.
- ...a unique venue for scientific activities that address natural systems and
- ...a learning laboratory for teaching conservation, preservation, ecosystem management, and resource stewardship.

## Why is the Olympic Wilderness Special?

The Olympic Wilderness is home to many species of plants and wildlife. Several of these are found nowhere else in the world. In the Olympic forests stand some of the world's largest trees, some towering over 300 feet above the forest floor. Olympic is home to most of the remaining herds of Roosevelt elk for which Olympic National Park was established. Olympic is one of the wildest places remaining in the contiguous United States.

Wonder, discovery, understanding, amazement, inspiration, solitude, renewal, challenge and much more await you in the Olympic Wilderness. There are many reasons the Olympic Wilderness is special and worthy of our care and protection. Some may only need pictures or descriptions to realize its importance to the survival and sustenance of human kind. If you have the opportunity to travel into the Olympic Wilderness, think about why it is special to you and how it might be special to others and do your best to leave Olympic in such a way that it will remain wild and unimpaired into the future.

Healthy Ecology at Work
Defenders of wilderness note that humans need wildlands as examples of unhindered, healthy ecological processes. Humans have altered the landscape so drastically that wilderness provides a necessary yardstick with which to measure the damage. For instance, intact wilderness plant and animal communities can help us measure the accelerating loss of biodiversity through species extinction.

While wilderness helps us gauge our destructiveness, it also works to mitigate the damage. Wild areas filter air and water, break down waste, recycle nutrients, and generate soil. Forests all over the world are carbon dioxide sinks, helping to balance man's increasing release of greenhouse gases in to the atmosphere, possibly moderating extreme weather and climatic fluctuations.

Wilderness as a Symbol Aldo Leopold said "Wilderness ... is the raw material of human culture and gives definition and meaning to the human enterprise. It provides the single starting-point, to which man returns again and again to organize yet another search for a durable scale of values." For Americans there is a clear relationship between wilderness and freedom. The wild frontier symbolized freedom from the restraints and confines of civilization. The act of preserving wilderness indicates a conscious decision to value the resources it harbors or do without others it might contain. "Going without" can be an enriching experience.

## Wildness Within

Wilderness is also a medium through which people can reconnect to the wildness within the human soul. For millennia our species lived much more closely to the land than we do now. Consequently, Sigmund Freud contends, humans find civilization oppressive and stressful.

When you visit the wilderness, think about what wilderness is to you? What could you do to help preserve Olympic's wilderness for future generations? In your camp and when traveling through wilderness, think about your actions and their impact on wildlife, plant life, other wilderness travelers and future generations of wilderness travelers. Over 50,000 people a year visit Olympic National Park's backcountry wilderness. If we limit our impacts, we can preserve the beauty and wildness of wilderness and prevent the debilitation of our experience and the experiences of others.

Please learn more about what you can do to Leave No Trace in Olympic's wilderness

## Wilderness Quotes

## Theodore Roosevelt

"There are no words that can tell of the hidden spirit of the wilderness..."

## Rachel Carson

"Those who contemplate the beauty of the earth find reserves of strength that will endure as long as life lasts. There is symbolic as well as actual beauty in the migration of the birds, the ebb and flow of the tides, the folded bud ready for the spring. There is something infinitely healing in the repeated refrains of nature - the assurance that dawn comes after night, and spring after the winter. The lasting pleasures of contact with the natural world are not reserved for scientist but are available to anyone who will place himself under the influence of earth, sea, and sky, and their amazing life."

## Annie Dillard

"Trees have a curious relationship to the subject of the present moment. There are many created things in the universe that outlive us, that outlive the sun, even, but I can't think about them. I live with trees. There are creatures under our feet, creatures that live over our heads, but trees live quite convincingly in the same filament of air we inhabit, and, in addition, they extend impressively in both directions, up and down, shearing rock and fanning air, doing their real business just out of reach. A blind man's idea of hugeness is a tree. They have their sturdy bodies and special skills; they garner fresh water; they abide.